



## Customer Premises Equipment Administration Guide

Release 2.1



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# Welcome to Linksys One

Thank you for choosing Linksys One, a complete, affordable, easy-to-install communications solution for small businesses. Linksys One delivers telephones, data networking, applications, and the Internet through one high-speed connection from a Hosted Service Provider (HSP). The system provides IP-based voice and data services with built-in security, reliability and premium call quality. With Linksys One, the network instantly detects new Linksys One devices and automatically configures them for optimal performance and simple management. Phones install in minutes, not the hours or days it takes with other solutions.

## Welcome VARs!

Linksys One delivers the communications solutions your customers want at the price they need. As your customers' businesses grow, you can help them easily connect new users, and sell additional technologies, such as network attached storage, while enabling the customer to protect their original investment. For example, Linksys One carriers will offer future high-value Internet-based application services that provide smarter ways to transact business. Linksys One resellers can leverage this momentum and create a foundation to sell additional services. For resellers, this is a great opportunity to grow your revenue and profit potential. You can capitalize on the growing demand for IP-based services with a more affordable, simpler and complete small business communications solution.

## About this Guide

The *Linksys One Customer Premises Equipment Administration Guide* is intended for qualified Value Added Resellers (VARs) who are installing, administering, and managing the Linksys One customer premises equipment (CPE). The guide assumes you have completed the Linksys One training and are familiar with all system software configuration and hardware installation procedures. The following topics are included:

- Chapter 1 "Welcome to Linksys One" provides an overview of this guide.
- Chapter 2 "Using the Linksys One Portal" describes how to use the Linksys One Portal to customize site-wide, voice, and data settings.
- Chapter 3 "Configuring Your System" describes how to configure your Linksys One system if you are using it for the first time.

### Automatic Configuration

Linksys One uses a network discovery process with automated configuration which means that new networks—as well as moves, adds, and changes—are fast and easy. As soon as they are plugged in, Linksys One devices automatically determine the optimal configuration and are ready to go.

- Chapter 4 "Viewing System Information" describes the contents of the Info screen on the Linksys One Portal. The Info screen shows the Brand, Account, and SVR information.
- Chapter 5 "Managing Accounts" describes the contents of the Accounts screen on the Linksys One Portal which includes information on managing Administrator accounts.
- Chapter 6 "Using the Phone Application" describes the contents of the Phone Application screen on the Linksys One Portal.
- Chapter 7 "Viewing the Surveillance Application" describes the Surveillance Application.
- Chapter 8 "Managing Data Devices" describes the contents of the Data Devices screen on the Linksys One Portal.
- Chapter 9 "Using the VAR View Screens" describes the contents of the VAR View screen on the Linksys One Portal.
- Chapter 10 "Using the Support View Screens" describes the contents of the Support View screen on the Linksys One Portal.
- Chapter 11 "Viewing Linksys One-Ready Devices" describes the contents of the L1 Devices screen on the Linksys One Portal.
- Chapter 12 "Viewing Site Status" describes the contents of the Site Status screen on the Linksys One Portal.



# Using the Linksys One Portal

Administering the Linksys One communications solution is easy! Although most system settings are already set for you, you can use the web-based Linksys One Portal to customize settings for your customer's site, users, and network. The Linksys One Portal can be accessed locally or remotely to customize all CPE voice features and a subset of CPE data features. The Linksys One Portal also includes a web-page that end-users can access to change their passwords, set personal call forwarding options, configure their auto dials, plus more.

## Understanding the Linksys One Portal

The Linksys One Portal shows different functions, shown in tabs, that are displayed depending on the login level. For example, when logged in as a User, only the Accounts and Phone Application function tabs are shown. When logged in as Support, all function tabs are shown.

A complete listing of available functions in relation to the login level is shown in the table below.

	Info	Accounts	Phone Application	Data Devices	VAR View	Support View	L1 Devices	Site Status
User		*	*					
Administrator	X	X	*	*				X
Install	X	X	X	X	X	*	X	X
Support	X	X	X	X	X	X	X	X

\* An abbreviated version of the application appears.

### System Requirements

To use the Linksys One Portal, you'll need to install the following programs on your computer:

- Macromedia Flash 8.0 or greater
- Microsoft Internet Explorer, version 5.5 or 6
- Mozilla FireFox 1.5 or greater

## Where are Passwords Set?

Passwords for the different login levels are set as follows:

- **User**—User passwords are set by the user. The default user password is “3” (steering digit) plus “extension number.” For example, if the extension is 700, then the default password is 3700. Once users log into the to the Portal, they are prompted to change their password; it is recommended that users change their default password for security reasons. User passwords can be reset to their default value in the **Accounts > Reset User Password** screen.
- **Administrator**—Administrator passwords are configured in the **Accounts > Manage Admin Accounts** screen.
- **Install**—The support password is set on the Service Node.
- **Support**—The support password is set on the Service Node.

## Accessing the Linksys One Portal

Here’s how to access and use the Linksys One Portal to customize your phone system.

1. Open a browser and type the IP address for the Services Router as follows:
  - If you are accessing the Linksys One Portal on a computer that is connected to a LAN port on the Services Router, type:

**https://L1admin**



**NOTE:** Depending on the security settings of some networks, you may need to type **https://L1admin.home**

- If you are accessing the Linksys One Portal on a computer that is remote from the Services Router, type the IP address of the Services Router in the format:

**https://proxy.<customer number>.<brand domain>:51**

2. In the Linksys One Portal login window, type a username and password and click **Go**.

**Login As:**

Extension/  
Username:


Password:

**Go**

After successful login, the main screen appears.

Info	Accounts	Phone Application	Data Devices	VAR View	Support View	L1 Devices	Site Status
------	----------	-------------------	--------------	----------	--------------	------------	-------------

<b>Brand Info</b>	
	
Linksys	

<b>Account Info</b>	
Service Provider ID	000000000001
Customer Number	8767
Customer Password	*****

<b>Services Router Info</b>	
MAC	00:00:00:00:00:00
IP	64.101.131.7
CPE Version	L1_r2.1

## Getting Online Help

For the Phone application, each page in the Linksys One Portal includes a **Help** button that provides quick answers to questions you may have about entering information on the associated page. Simply click the **Help** button to display help for that page.

# Configuring Your System

If you are configuring your Linksys One system for the first time, you can use the following steps to ensure optimal operation. Here you will configure users, define hours of operation, set up voicemail, configure devices, and assign passwords.

## To Configure Linksys One

1. Configure steering digits and the site caller ID using the **Install > Dialing** screen. Refer to "Defining Dialing Patterns" section on page 29.
2. Add users in the **Users > User Directory** screen. Refer to "Assigning Names to Users" section on page 43.
3. Configure Users
  - a. Set up user permissions in the **Users > Permissions** screen. Refer to "Assigning Permissions to Users" section on page 49.
  - b. Assign numbers to users' phones in the **Users > Inbound Trunks** screen. Refer to "Assigning Trunks to Users" section on page 60.
  - c. (Optional) Define Groups and Roles in the **Install > Define Groups** and **Install > Define Roles** screens. Refer to "Defining Groups" section on page 23 and "Defining Roles" section on page 26.
  - d. (Optional) Assign users to groups and roles in the **Users > Group Assignments** and **Users > Role Assignments** screens. Refer to "Assigning Users to Groups" section on page 45 and "Assigning Users to Roles" section on page 46.
  - e. (Optional) Assign Assistants to Users in the **Users > Assistants** screen. Refer to "Assigning Assistants to Users" section on page 55.
  - f. (Optional) Assign phone numbers to groups and roles in the **Call Targets > Inbound Trunks** screen. Refer to "Assigning Inbound Trunks to Call Targets" section on page 82.
  - g. (Optional) Set up call forwarding and voicemail options for groups and roles in the **Call Targets > Call Forwards** and **Call Targets > Voicemail** screens. Refer to

- "Configuring Call Forward Options" section on page 84 and "Defining System Voicemail Boxes" section on page 80.
4. (Optional) Change the time for the nightly maintenance window in the **Site > Settings** screen. Refer to "Configuring Site Settings" section on page 32.
5. Set AutoAttendant Days and Hours in the **Site > AA Days** and **Site > AA Hours** screens. Refer to "Defining Auto Attendant Days" section on page 38 and "Defining Auto Attendant Hours" section on page 36.
6. Record AutoAttendant greetings (dial the AA Admin number, which, by default is 4x98, where 4 is a steering digit and x is a number of zeroes (0s), depending on the site mask). The AA Admin default password is the same as the AA Admin number.
7. Associate physical phones to users in the **Users > Device Assignments** screen (phones are identified by MAC address). If users were pre-configured for this installation, this step may not be required. Refer to "Assigning Devices" section on page 64.
8. Continue with site-specific custom configuration. For example:
  - a. Configure FXO devices in the **Install > FXO Devices** screen. Refer to "Configuring FXO Devices" section on page 17.
  - b. Configure FXS devices (can be fax, phone or paging) in the **Install > FXS Devices** screen. Refer to "Configuring FXS Devices" section on page 19.
9. Create Admin accounts, as needed in the **Accounts > Manage Admin Accounts** screen. Refer to "Managing Admin Accounts" section on page 10.
10. Change system passwords, as needed in the **Accounts > Manage System Passwords** screen. Refer to "Managing System Passwords" section on page 11.

# Viewing System Information

The Info screen shows the Brand, Account, and Services Router information. This information is display-only; no changes can be made here.



**TIP:** Before logging in, the Info screen is also available from the Admin, Install, or Support roles.

## Viewing Brand Information

The Brand Information area shows the name of the brand and the logo that displays on the phones at the customer's site. This information is configured on the Service Node. For more information regarding brands and brand logos, refer to the *Service Node System Administration Guide*, available on the Linksys Partners Connection (LPC) portal. Refer to "Linksys Partner Connection Portal" section on page 137 for more information about the LPC.

## Viewing Account Information

The Account Information area shows the Service Provider ID, Customer Number, and Customer Password. For security purposes, the customer password is not shown in this screen.

## Viewing Services Router Information

The Services Router Information area shows the MAC address, IP address, and the CPE software version currently running on the Services Router.

<b>Brand Info</b>	
LINKSYS One	
Linksys	
<b>Account Info</b>	
Service Provider ID	0000000000001
Customer Number	8767
Customer Password	*****
<b>Services Router Info</b>	
MAC	00:00:00:00:00:00
IP	64.101.131.7
CPE Version	L1_r2.1

# Managing Accounts

The Accounts screens allows you to reset a user or system password and manage administration accounts. This tab contains three functions: Reset User Password, Manage Admin Accounts, and Manage System Passwords.

These sections help you use the Accounts features:

- "Resetting User Passwords" section on page 9
- "Managing Admin Accounts" section on page 10
- "Managing System Passwords" section on page 11



## Resetting User Passwords

The Reset User Password screen allows you to reset a password for a selected user. If you are logged in as a user, you can change the password only for that user. If you are logged in as Admin or above, you can reset any user passwords.

**To reset a user password:**

1. Click **Accounts > Reset User Password**.
2. Select a user for which you want to change the password.



**NOTE:** The default password for the Auto Attendant is 498 (for a 4XX steering digit pattern). Add "0" after the "4" for longer patterns. For example, for a pattern of 4XXX, the password is 4098.



**NOTE:** The default password for the operator voicemail box is 3450.

- Click **Reset Password**. The password for the user changes to its default setting.

## Managing Admin Accounts

The Manage Admin Accounts screen allows you to change a password for an existing Admin account, create a new Admin account, or delete an Admin account. This screen is available only when logged in as Install or Support.

### To change an Admin password:

- Click **Accounts > Manage Admin Accounts**.
- In the Existing Account area, select an Admin account for password change.
- Type a new password in the New Password area.
- Retype the password in the Confirm Password area.



**TIP:** The password is case-sensitive and can be any combination of letters and numbers. Special characters such as “!” and “&” cannot be used.

- Click **Change Password**.

### To delete an Admin account:

- Click **Accounts > Manage Admin Accounts**.
- In the Delete Account area, select an Admin account to delete.
- Click **Delete Account**.

### To create a new Admin account:

- Click **Accounts > Manage Admin Accounts**.
- In the New Account area, type a new Admin name.
- Type a password in the Password area.



4. Retype the password in the Confirm Password area.



**TIP:** The password is case-sensitive and can be any combination of letters and numbers. Special characters such as "!" and "&" cannot be used.

5. Click **Create Account**.

## Managing System Passwords

The Manage System Passwords screen allows you to reset or change a password for the Auto Attendant or system voicemail boxes. This screen is only available when logged in as Admin level and above.

**To reset a system or voicemail box password:**

1. Click **Accounts > Manage System Passwords**.
2. In the Reset Password area, select the Auto Attendant or a voicemail box.



**NOTE:** The default password for the Auto Attendant is 4x99. The default password for system voicemail is 4x98. Where "x" is a padding zero.

3. Click **Reset Password**. The password for the Auto Attendant or voicemail box changes to its default setting.








**To change a system or voicemail box password:**

1. Click **Accounts > Manage System Passwords**.
2. In the Change Password area, select the Auto Attendant or a voicemail box.
3. Type a new password in the New Password area.
4. Retype the password in the Confirm Password area.
5. Click **Reset Password**.

# Using the Phone Application

The Phone Application allows you to manage the Linksys One phones, devices, and user settings.

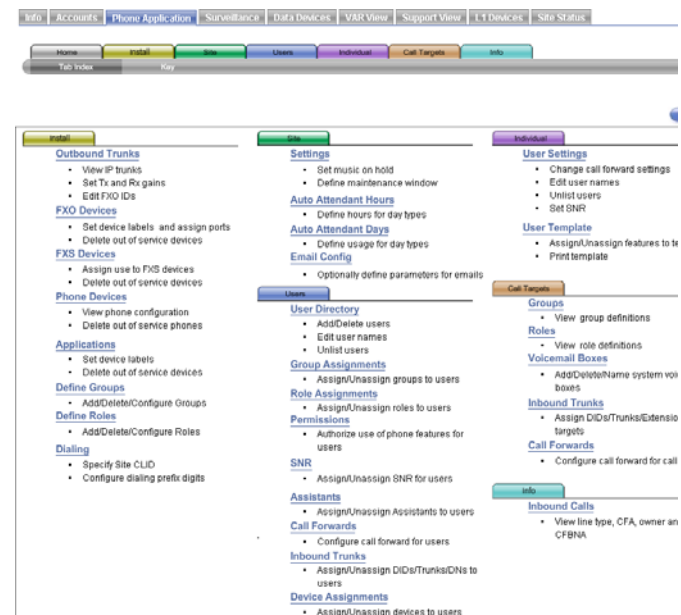
These sections help you use the Phone application:

-  "Finding Your Way Home" section on page 13
-  "Setting Install Time Configuration" section on page 15
-  "Configuring Site Settings" section on page 32
-  "Managing Users" section on page 43
-  "Changing Individual User Settings and Templates" section on page 65
-  "Configuring and Viewing Call Target Information" section on page 77
-  "Viewing System Information" section on page 87

Once you login to the Phone Application, you'll see the **Tab Index** window that shows you all the available features for the Phone Application. Simply click any hyperlinked item in the list to go directly to the window where you can configure that setting.

## How do I change a setting?

1. Click an action you want to perform. Alternatively, you can click a Phone Application tab to see a menu bar for that topic. For example, click the **Users** tab to view the menu bar with options for configuring your users.
2. Make your changes.
3. Click **Commit** to submit your changes or click **Cancel** to discard all changes for this window.
4. To change settings on a different window, click one of the Phone Application tabs, or click the **Home** tab to return to the Tab Index window.



## When do my changes take effect?

Depending on the type of change, some changes take effect immediately when you click **Commit** while others require the phone or system to restart before they take effect. After you commit a change, click **Changes Pending** or **System Changes Pending** to see which changes are not yet active and the time they will take effect. If you want the changes to take effect immediately, click **Restart Phone** (for changes pending) or **Restart System** (for system changes pending). Otherwise, the changes will not go into effect until the next system maintenance window.



**IMPORTANT:** Restarting the system will cause a brief loss of phone and data services.

## Online Help

Each page in the Phone Application includes a **Help** button that provides quick answers to questions you may have about entering information on the associated page. Simply click the **Help** button to display help for that page.

## Finding Your Way Home

By default, the Phone Application opens to the **Home** screen. From this screen you can see the **Tab Index** and go to the **Key** screen which explains graphical elements and visual cues used throughout the Phone Application. To go back to the **Home** page from any other location, click the **Home** tab.

## Navigating with the Tab Index

The **Tab Index** is the first screen that opens when you start the Phone Application. It contains an index of the Phone Application features. An expanded view of the tabs is located below the row of tabs. To navigate to a different screen, click on its hyperlinked title or click on one of the tabs on top of the **Tab Index** screen.

## Understanding Visual Cues on the Phone Application Screens

Graphical elements are used in the windows to indicate various items in the application. Click **Key** on the **Home** tab to display a description how items, colors, and visual cues are used.

## Setting Install Time Configuration

The **Install** tab in the Phone Application lets you configure trunks, devices, applications, groups, and roles for your customer's site. You can also configure dialing settings for the user's phones.

### Viewing and Configuring Trunks

The Outbound Trunks screen allows you to view the IP trunks assigned to this site, specify labels to identify local trunks, allow local trunk usage for outbound calls, and set the gain of the local trunks.

Info
Accounts
Phone Application
Data Devices
VAR View
Support View
L1 Devices
Site Status

Home
Install
Site
Users
Individual
Call Targets
Info

Outbound Trunks
FXO Devices
FXS Devices
Phone Devices
Applications
Define Groups
Define Roles
Dialing

Help

IP Trunks		Type
279-400-1042		DID Trunk
279-400-1016		DID Trunk
279-400-1044		DID Trunk

Local Trunks	Allow Outbound Use	Gains	Gateway
777-777-0001	<input checked="" type="checkbox"/>	Tx Gain <input type="text" value="4"/> Rx Gain <input type="text" value="0"/>	VGA2000 XX:11:A0:00:00:70 Line:2
777-777-0002	<input checked="" type="checkbox"/>	Tx Gain <input type="text" value="4"/> Rx Gain <input type="text" value="0"/>	VGA2100 XX:11:A0:00:00:60 Line:1
777-777-0003	<input checked="" type="checkbox"/>	Tx Gain <input type="text" value="4"/> Rx Gain <input type="text" value="0"/>	VGA2100 XX:11:A0:00:00:60 Line:2
777-777-0004	<input checked="" type="checkbox"/>	Tx Gain <input type="text" value="4"/> Rx Gain <input type="text" value="0"/>	VGA2100 XX:11:A0:00:00:60 Line:3

Refer to the following table for a description of the information displayed in the Outbound screen.

Field	Description
IP Trunks	The IP trunks assigned to this site by the Service Node. These are automatically downloaded to the site and updated during the maintenance window.
Type	The type of IP trunk. There are two types of IP trunks: DID and non-DID. A Direct Inward Dial (DID) number is an externally reachable number that can be assigned as a primary extension. A non-DID trunk cannot be assigned as a primary extension.
Local Trunks	The list of discovered PSTN connected local FXO trunks on this site that are connected either to a VGA2000 or VGA2100 gateway. This area also allows you to set transmit and receive gain of the trunks.
Allow Outbound Use	Allows this local trunk to be placed in the outbound trunks pool and used with the Local Trunk steering digit. <b>Note:</b> FXO trunks will not be discovered or listed unless they are plugged into an operational PSTN port.
Gains	The transmit (Tx Gain) and receive (Rx Gain) gain settings of the local trunk.
Gateway	The model number, Media Access Control (MAC) address, and line number of the voice gateway device. If a trunk is not assigned to an FXO device, a Delete button appears which allows you to delete the row.

#### To assign a label to a local trunk:


1. Type a label for the local trunk in the Local Trunks field.



**NOTE:** This field is only a label; the number you enter is not validated as a local trunk number.

2. Click **Commit**.

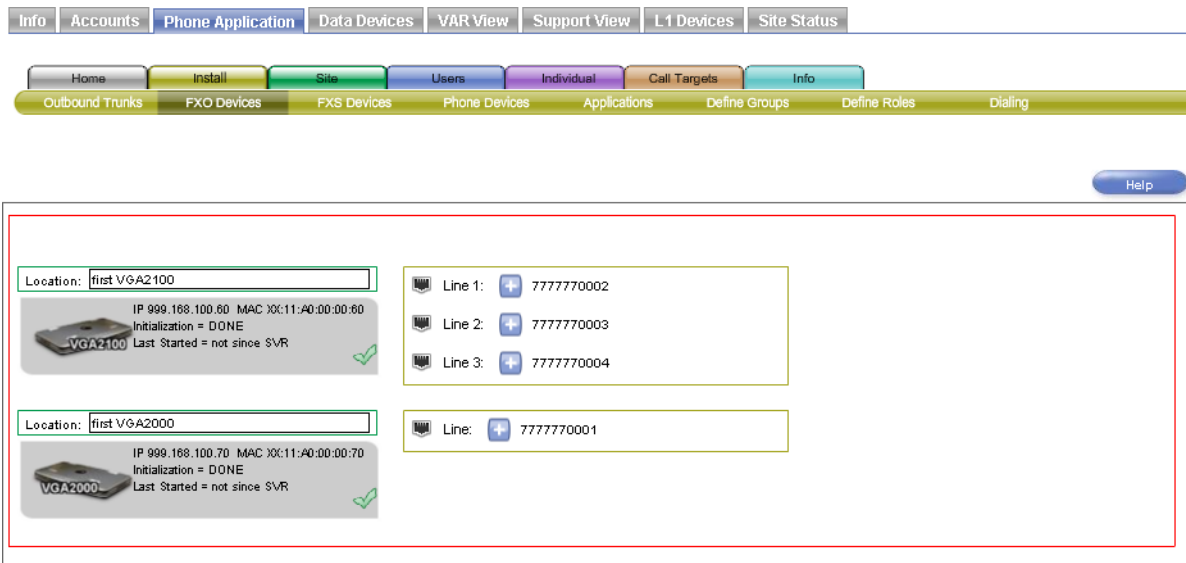
## To change Tx and Rx Gain settings:

1. In the Tx or Rx Gain setting area, click the Up or Down button (  ) to change the transmit or receive gain value.
2. Click **Commit**.

## Configuring FXO Devices

The FXO Devices screen allows you to see the status of the FXO devices, such as voice gateways, that are connected to your Services Router. This screen also allows you to specify a label for each FXO device and assign trunks to ports.

An FXO device (Foreign Exchange Office) device connects to the lines of a central office.



Refer to the following table for a description of the information displayed in the FXO Devices screen.

Field	Description
IP	The Internet Protocol (IP) address of the device.
MAC	The Media Access Control (MAC) address is the unique identifier for the device. This number is also printed on the device.
Initialization	The status of the initialization process.
Last Started	The time since the system was last started.
Line	The port label as indicated on the physical port of the device. For each available port, a label is displayed next to the RJ-11 icon.

#### To add a Location to an FXO Device:

1. Type location text in the Location field.



**NOTE:** The Location field is a descriptive label only and is not used anywhere else in the Linksys One system.

2. Click **Commit**.

#### To assign a trunk to the port of a Device:

1. Click the more (+) and choose a trunk.
2. If necessary, repeat step 1 for all other ports.
3. Click **Commit**.

#### FXO Device Location Fields

Location: first floor

IP 999.168.100.60 MAC 30C11:A0:00:00:60  
Initialization = DONE  
Last Started = not since SVR

VGA2100

Line 1  
Line 2  
Line 3

Location: second floor

IP 999.168.100.70 MAC 30C11:A0:00:00:70  
Initialization = DONE  
Last Started = not since SVR

VGA2000

Line:



## Configuring FXS Devices

The FXS Devices screen allows you to see the status of the FXS devices connected to your Services Router. You can also assign the port usage of each port on the FXS device.



**NOTE:** When a port is set to FAX, the VGA will only accept G.711 calls; even if only one port is set to FAX. G.711 is the international standard for encoding audio on a 64 kbps channel.

Refer to the following table for a description of the information displayed in the FXS Devices screen.

Field	Description
Location	The physical location of the FXS device. This is only a text label used to specify its location.
IP	The Internet Protocol (IP) address of the device.

An FXS device (Foreign Exchange Station) or port on an FXS device, allows an analog telephony device, such as a phone handset or fax machine to be connected. The FXS device provides dial tone and ring voltage to the analog telephony device.

Field	Description
MAC	The Media Access Control (MAC) address is the unique identifier for the device. This number is also printed on the device.
Initialization	The status of the initialization process.
Last Started	The time since the FXS device was last started.

### To assign the port usage of an FXS port:

1. Click the FXS device port drop down button (▾) on the port that you want to change.
2. Select a port usage of the port.
3. Click **Commit**.

## Viewing Phone Devices

The Phone Devices screen allows you to see the status of the user's phones.

Info
Accounts
Phone Application
Data Devices
VAR View
Support View
L1 Devices
Site Status

Home

Install

Site

Users

Individual

Call Targets

Info

Outbound Trunks
FXO Devices
FXS Devices
Phone Devices
Applications
Define Groups
Define Roles
Dialing

IP 192.168.10.25 MAC 00:14:BF:4C:53:BD  
Initialization = DONE  
Last Started = 13:06:04  
User = Candace Bismarck(704)

IP 192.168.10.24 MAC 00:16:B6:6F:06:07  
Initialization = DONE  
Last Started = 15:53:29  
User = Jackie Augusta(702)

IP 192.168.10.27 MAC 00:16:B6:6F:01:60  
Initialization = DONE  
Last Started = 13:06:04  
User = Steve Montgomery(606)

IP 192.168.10.26 MAC 00:16:B6:6F:0C:17  
Initialization = DONE  
Last Started = 13:06:04  
User = Tammy Lansing(701)

IP 192.168.10.23 MAC 00:16:B6:6F:05:60  
Initialization = DONE  
Last Started = 13:06:04  
User = Henry Austin(703)

IP 192.168.10.22 MAC 00:09:37:02:1D:7F  
Initialization = DONE  
Last Started = 13:05:58  
User = Jerry Denver(700)

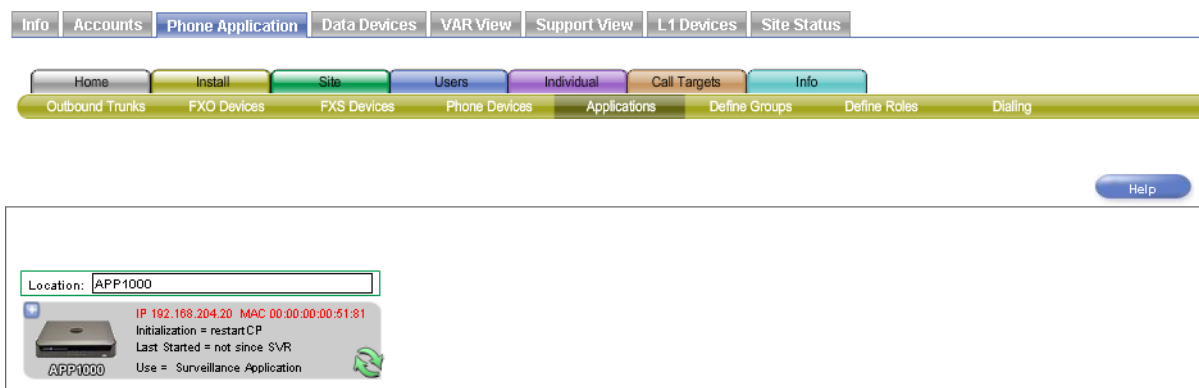
Phones that are not registered with the Services Router appear with red text in the IP/MAC line. You can delete a removed, or defective, phone from this screen by clicking the options (+) button and selecting Delete.

Refer to the following table for a description of the information displayed in the Phone Devices screen.

Field	Description
IP	The Internet Protocol (IP) address of the device.
MAC	The Media Access Control (MAC) address is the unique identifier for the device. This number is also printed on the device.
Initialization	The status of the initialization process.
Last Started	The time since the system was last started.
User	The name and extension of the user assigned to the phone.

## Viewing Application Device Status

The Applications screen allows you to see the status of your application device and the application that is currently loaded.



Refer to the following table for a description of the information displayed in the Applications Devices screen.

Field	Description
Location	The physical location of the application device. This is only a text label used to specify its location.
IP	The Internet Protocol (IP) address of the device.
MAC	The Media Access Control (MAC) address is the unique identifier for the device. This number is also printed on the device.
Initialization	The status of the initialization process.
Last Started	The time since the system was last started.
Use	The name of the application loaded on the application device.

**To assign a location label to an Application Device:**

1. Type label text in the location field.
2. Click **Commit**.

## Defining Groups

The Define Groups screen allows you to create or modify groups into which you can place users. For example, you may categorize your users into groups such as “Sales” or “Support.” Changes to this screen require a system restart before they take effect.

Group Name	Users	Group Extension			Group VM Enable
		Enable	Buttons	CLID	
Assistants	1	<input type="checkbox"/>	2	Site CLID	<input type="checkbox"/>
Sales	3	<input type="checkbox"/>	2	Site CLID	<input type="checkbox"/>
Marketing	2	<input type="checkbox"/>	2	Site CLID	<input type="checkbox"/>



**NOTE:** The Assistants group is included by default and cannot be deleted. Assistants are assigned to users in the **Users > Assistants** screen.

Users are assigned to groups in the **Users > Group Assignments** screen.

A Group is an extension that is created for the purpose of sharing calls among devices. An incoming call rings simultaneously on all devices in the group. All devices show the call state.

Refer to the following table for a description of the information displayed in the Define Groups screen.

Field	Description
Group Name	Name assigned to the group. The group name assigned here also appears on the following screens: <ul style="list-style-type: none"> <li>• <b>Users &gt; Group Assignments</b></li> <li>• <b>Call Targets &gt; Groups</b></li> <li>• <b>Call Targets &gt; Voicemail Boxes</b> (if "Group VM Enable" is checked)</li> <li>• <b>Call Targets &gt; Inbound Trunks</b> (if "Group Extension Enable" is checked)</li> <li>• <b>Call Targets &gt; Call Forwards</b> (if "Group Extension Enable" is checked)</li> <li>• <b>Individual &gt; User Template</b> (if "Group Extension Enable" is checked and the user is assigned in the <b>Users &gt; Group Assignments</b> screen)</li> <li>• <b>Info</b> (if a trunk is assigned to the group)</li> </ul>
Users	Number of users assigned to this group as specified in the <b>Users &gt; Group Assignments</b> screen.
Group Extension	Allows you to enable group extensions, assign number of buttons, and choose a Calling Line Identification (CLID) for the group.
Enable	Enables or disables this group extension. When enabled, the group name also appears on the <b>Individual &gt; User Template</b> screen for a user assigned to the group. <b>Note:</b> Even if a group extension is not enabled on this screen, the group will still appear on the <b>Users &gt; Group Assignments</b> screen; however, the group extension must be enabled to assign the group button on the user's phone. Even though a group may be disabled, it still can be used as a filter for displaying users with the Filter Users pulldown.
Buttons	The number of buttons allocated to each user's phone for this group.
CLID	The CLID displayed on calls from this group. <b>Note:</b> For customers using local trunks only, this field is not available.
Group VM Enable	Enables or disables a voicemail box for this group. <b>Note:</b> For external voicemail, a trunk must be assigned to the group in the <b>Call Targets &gt; Inbound Trunks</b> screen.

CLID is a telephony service that transmits the caller's telephone number and in some places the caller's name to the called party's telephone equipment during the ringing signal or when the call is being set up but before the call is answered.

**To create a new group:**

1. Click Add Group.
2. Type a name for the group in the Group Name area.
3. Click **Commit**.

**To delete a group:**

1. Click the Delete button next to the group you want to delete.
2. Click **Commit**.

**To enable and configure a Group Extension:**

1. In the Group Extension area, click the Enable checkbox (☑).
2. Click the more button (⊕) and select the number of buttons to allocate to each user's phone for this group.
3. Click the more button (⊕) and choose a CLID for this group.
4. Click **Commit**.

**To enable a voicemail box for a group:**

1. In the Group VM area, click a checkbox for the appropriate group.
2. Click **Commit**.

## Defining Roles

The Define Roles screen allows you to create or modify roles into which you can place users. For example, you may categorize your users into a role such as "Operators." Changes to this screen require a system restart before they take effect.

A role is an extension that is created for the purpose of rolling an unanswered call to other devices in a pre-determined order.

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Accounts
Phone Application
Data Devices
VAR View
Support View
L1 Devices
Site Status

Home
Install
Site
Users
Individual
Call Targets
Info

Outbound Trunks
FXO Devices
FXS Devices
Phone Devices
Applications
Define Groups
Define Roles
Dialing

Help

Role Name	Users	Role Extension			Role VM Enable
		Enable	Buttons	CLID	
Operator	2	<input checked="" type="checkbox"/>	2	Site CLID	<input checked="" type="checkbox"/>
Security	1	<input type="checkbox"/>	2	Site CLID	<input type="checkbox"/>

Delete
Add Role



**NOTE:** The Operator role is included by default and cannot be deleted.

Users are assigned to roles in the **Users > Role Assignments** screen.



Refer to the following table for a description of the information displayed in the Define Roles screen.

Field	Description
Role Name	<p>Name assigned to the role. The role name assigned here also appears on the following screens:</p> <ul style="list-style-type: none"> <li>• <b>Users &gt; Role Assignments</b></li> <li>• <b>Call Targets &gt; Roles</b></li> <li>• <b>Call Targets &gt; Voicemail Boxes</b> (if "Role VM Enable" is checked)</li> <li>• <b>Call Targets &gt; Inbound Trunks</b> (if "Role Extension Enable" is checked)</li> <li>• <b>Call Targets &gt; Call Forwards</b> (if "Role Extension Enable" is checked)</li> <li>• <b>Individual &gt; User Template</b> (if "Role Extension Enable" is checked and the user is assigned in the <b>Users &gt; Role Assignments</b> screen)</li> <li>• <b>Info</b> (if a trunk is assigned to the role)</li> </ul>
Users	Number of users assigned to this role as specified in the <b>Users &gt; Role Assignments</b> screen.
Role Extension	Allows you to enable role extensions, assign number of buttons, and choose a Calling Line Identification (CLID) for the role.
Enable	Enables or disables the role's extension. When enabled, the role name also appears on the <b>Individual &gt; User Template</b> screen for a user assigned to the role. <b>Note:</b> Even if a role extension is not enabled on this screen, the role will still appear on the <b>Users &gt; Role Assignments</b> screen; however, the role extension must be enabled to assign the role button to the user's phone. Even though a role may be disabled, it still can be used as a filter for displaying users with the Filter Users pulldown.
Buttons	The number of buttons allocated to each user's phone for this role.
CLID	The CLID displayed on calls from this role. <b>Note:</b> For customers using local trunks, this field is not available.
Role VM Enable	Enables or disables a voicemail box for this role. <b>Note:</b> For external voicemail, a trunk must be assigned to the role in the <b>Call Targets &gt; Inbound Trunks</b> screen.

**To create a new role:**

1. Click Add Role.
2. Type a name for the group in the Role Name area.
3. Click **Commit**.

**To delete a role:**

1. Click the **Delete** button next to the role you want to delete.
2. Click **Commit**.

**To enable and configure a role:**

1. In the Role Extension area, click the Enable checkbox (☒)
2. Click the more button (+) and select the number of buttons to allocate to each user's phone for this role.
3. Click the more button (+) and choose a CLID for this role.
4. Click **Commit**.

**To enable a voicemail box for a role:**

1. In the Role VM area, click a checkbox for the appropriate role.
2. Click **Commit**.

## Defining Dialing Patterns

The Dialing screen allows you to specify a default Calling Line Identification (CLID) for the site, enable Auto Attendant after hours forwarding, and assign steering digits.

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Accounts
Phone Application
Data Devices
VAR View
Support View
L1 Devices
Site Status

Home
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Site
Users
Individual
Call Targets
Info

Outbound Trunks
FXO Devices
FXS Devices
Phone Devices
Applications
Define Groups
Define Roles
Dialing

Help

**Site CLID Label**  
Capital Standard Widgets

**Site CLID**  
12905551000

**Auto Attendant After Hours Forwarding**  
☒

Steering Digit	Pattern	Function
1		
2	2XXXX	Inter-Site
3	3XXX	Voicemail
4	4XX	Group, Role, AA
5	5XX	Parked Call Retrieval
6	6XX	Internal Extension
7	7XX	DID Extension
8		
9	9	IP Trunk
0	0	Operator



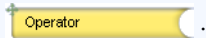
**NOTE:** The site CLID is over-ridden if a different CLID is assigned to a role in the **Install > Define Roles** screen, if a group in the **Install > Define Groups** screen, or if **Private CLID** is enabled for the user in the **Users > Permissions** screen.



**TIP:** Normally, Site CLID cannot be assigned to a user's extension. However, you can assign a CLID to a user if you unassign the extension from the user in the **Users > Inbound Trunks** screen, assign the extension as Site CLID in the **Install > Dialing** screen, then reassign that extension back to the user in the **Users > Inbound Trunks** screen.

Refer to the following table for a description of the information displayed in the Dialing screen.

Field	Description
Site CLID Label	CLID label for the site.
Site CLID	CLID assigned to this site. <b>Note:</b> For customers using local trunks, this field is not available.
Auto Attendant After Hours Forwarding	Enables calls to AA to be concurrently directed to another number; both the AA and additional number phone ring at the same time. This feature is useful if you want an after-hours service to answer calls that have been directed to the after-hours Auto Attendant. The number is assigned in <b>Site &gt; Settings (Auto Attendant After Hours Forwarding Transfer Number)</b> field).
Steering Digit	Prefix digits for accessing functions. For example, if the function "IP Trunk" is assigned to steering digit 9, then the user must press 9 to access an IP trunk. A steering digit with a circular target drop target (⊙) means that a function has not been assigned to that steering digit.

Field	Description
Pattern	Dialing pattern for each Steering digit. Each "X" in this column can be any valid digit.
Function	Name of the action, or function, that is assigned to a steering digit. <b>Note:</b> The function objects are shown in two different sizes: short and long. The long objects cannot be assigned to digit 0, but the short objects can be assigned to any digits including 0. Here is an example of the (short) Operator function: 

#### To change the site CLID:

1. Click the more button (⊕) to see a list of available numbers.
2. Select one of the available numbers to be used for calling line identification.
3. Click **Commit**.

#### To enable the Auto Attendant External Night Service:

1. Click the Auto Attendant External Night Service checkbox (☑).
2. Click **Commit**.

**To change the assignment of a function to a different steering digit:**

1. Locate a function that you want to assign to another steering digit.
2. For each function that you want to assign, drag its move icon (+) to the circular target (●) for the new steering digit.



**NOTE:** If a steering digit already contains a function, drag its move icon (+) anywhere on the target area and the new function replaces the existing function. The existing function is moved to the location of the new function (they are swapped).

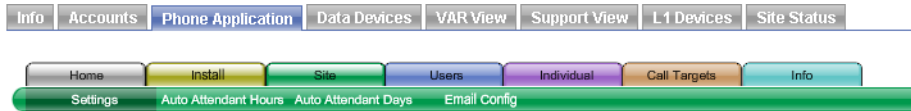
3. Click **Commit**.

## Configuring Site Settings

Site settings affect the overall customer's site. They include things like defining a system maintenance window and selecting the music to play to callers on hold. Here you can also document comments about the site. Site settings are configurable from the **Site** tab in the Phone Application.

## Setting Site Options

The Settings screen allows you to change the Music on Hold, change the time that the Maintenance window occurs, assign an after-hours Auto Attendant (AA) forwarding number, and enter comments about the site.



Select music on hold for external lines:

Maintenance Window:

Auto Attendant After Hours Forwarding Transfer Number:

Phone Desktop:

Site Comments:

Refer to the following table for a description of the information displayed in the Site screen.

Field	Description
Select music on hold for external lines	Select the music that outside callers hear when they are placed on hold. The change will affect any subsequent calls placed on hold.
Maintenance Window	<p>Once a day, the Services Router checks for changes that are waiting to be made to the phone system. This includes changes committed through the Phone Application as well as any service or software changes from the Service Node. You can define a two-hour window for the maintenance to occur, but by default, the two-hour maintenance window occurs randomly between 12 AM and 5 AM. Maintenance can take approximately 30 minutes and can cause the system to become unavailable to users; choose a time when the system is not normally in use. Changes in this screen are applied immediately without restarting any hardware when you click <b>Commit</b>.</p> <p>During system maintenance, the Services Router:</p> <ul style="list-style-type: none"> <li>• Writes the current database to the USB key (SVR3000 only).</li> <li>• Attempts (once) to back up the current database to the Service Node.</li> <li>• Reboots if there are pending changes made by the Linksys One Portal that need to be distributed to system.</li> <li>• Attempts (once) to read provisioning data from the Service Node. If the attempt is successful and if there are changes in either the target software version or in the provisioning data itself, then the Services Router reboots and causes the changes to take effect.</li> </ul>
Phone Desktop	If a phone desktop is not assigned on the Service Node, then this option allows you to choose a different desktop for the phones in the system.



Field	Description
Auto Attendant After Hours Forwarding Transfer Number	<p>The Auto Attendant After Hours Forwarding Transfer Number area allows you to assign an after-hours AA forwarding number. An after hours call is forwarded to both this number and to the operator. If no number is entered in this field, the call is forwarded to the operator.</p> <p><b>Note:</b> the <b>Auto Attendant After Hours Forwarding</b> option in the <b>Install &gt; Dialing</b> screen must be checked for this option to be available.</p> <p><b>Note:</b> A steering digit must precede the AA Forwarding number. For example, if the AA Forwarding number is 214-555-1212 and the steering digit for an IP Trunk is 9, then the number to enter would be 9-214-555-1212.</p>
Site Comments	You can enter text in the Site Comments area that pertain to this site. For example, you could put site contact information in this area.

#### To select music for external lines on hold:

1. Click the drop down button (▼) in the Select music on hold for external lines area.
2. Select one of the available music titles.
3. Click **Commit**.

#### To change the maintenance window:

1. Click the down arrow (▼) in the Maintenance Window area.
2. Select one of the available maintenance windows.
3. Click **Commit**.

#### To change the phone desktop:

1. Click the down arrow (▼) in the Phone Desktop area.
2. Select one of the available desktop choices.
3. Click **Commit**.

**To assign an after-hours AA forwarding number:**

1. Ensure that the **Auto Attendant After Hours Forwarding** option is checked (☒) in the **Install > Dialing** screen.
2. Enter a valid phone number in the Auto Attendant After Hours Forwarding Transfer Number area.



**NOTE:** A steering digit must precede the AA Forwarding number. For example, if the AA Forwarding number is 214-555-1212 and the steering digit for an IP Trunk is 9, then the number to enter would be 9-214-555-1212.

3. Click **Commit**.

**To enter site comments:**

1. Put the cursor in the Site Comments text box.
2. Enter any comments that you want about this site.
3. Click **Commit**.

**Defining Auto Attendant Hours**

The Auto Attendant Hours screen allows you to define the times that the Auto Attendant answers calls and plays the main greeting. You can specify up to five different day types. For example, for the day type “Regular” you can customize the Auto Attendant to play the main greeting from 8:00 AM to 6:00 PM.

Check the boxes for the times that you want the Auto Attendant to answer calls with the main greeting. If you leave a box unchecked, the Auto Attendant plays the closed greeting for that time interval.

In this screen, you can also customize labels for the type of days. The labels you enter here appear in the **Site > Auto Attendant Days** screen.

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Support View
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Site Status

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Info

Settings
Auto Attendant Hours
Auto Attendant Days
Email Config

Help

	Closed	Regular	Short	Long	Other
12 - 1 AM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1 - 2 AM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 - 3 AM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 - 4 AM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 - 5 AM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 - 6 AM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 - 7 AM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7 - 8 AM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8 - 9 AM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9 - 10 AM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10 - 11 AM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11 AM - 12 PM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12 - 1 PM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1 - 2 PM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 - 3 PM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 - 4 PM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 - 5 PM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 - 6 PM	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6 - 7 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7 - 8 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8 - 9 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9 - 10 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10 - 11 PM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11 PM - 12 AM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**To customize type of days labels:**

1. Type a new label in the label area.
2. Click **Commit**.

After configuring hours for each type of day, configure the days to use them on the Auto Attendant Days screen.

**To set Auto Attendant hours:**

1. Check the boxes for the times that you want the Auto Attendant to answer calls with the main greeting. If you leave a box unchecked, the Auto Attendant plays the closed greeting for that time interval.
2. (Optional) Change the labels for the type of days by clicking in the label box and typing a new label. For example, you can change the day type labeled "Short" to "Mornings."
3. Click **Commit**.

**Defining Auto Attendant Days**

The Auto Attendant Days screen allows you to define how the Auto Attendant answers calls on each day of the week. For example, you can define Monday as a "regular" day and Saturday as a "closed" day. Here you can also add custom dates and associate a specific day type. For example, you could create January 1, 2008 as a "closed" day.

	Closed	Regular	Short	Long	Other
Monday	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tuesday	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wednesday	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thursday	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friday	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saturday	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sunday	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1 Jan 2008	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>


You configure the specific hours for “regular” and “closed” and other day types on the **Site > Auto Attendant Hours** screen.

Refer to the following table for a description of the information displayed in the Auto Attendant Days screen.

Field	Description
Days of the Week and Day Type	<p>This vertical column lists the days of the week (Monday through Sunday) and the custom days. You can add more custom dates to this column.</p> <p>The column headings are defined on the <b>Site &gt; Auto Attendant Hours</b> screen.</p>

Field	Description
Add Day	This button allows you to add a custom day (a holiday for example) to the schedule.
Delete	This button enables you to delete a custom date that you have added. If you have not added any custom dates, this button is not visible.

**To add a day:**

1. Click **Add Day**. A new day appears in the list.
2. Click the Calendar button () and select a date.
3. For each date you add, select the day type (for example, Closed, Regular, Short, Long or Other).
4. Click **Commit**.

**To set Auto Attendant days:**

1. For each day of the week, select the type of day. Each day can be assigned to only one day type.
2. Click **Commit**.

## Configuring Email

The Linksys One solution uses email for voicemail delivery and CPE alerts. However, some outgoing Simple Mail Transfer Protocol (SMTP) email servers require that mail clients login to a server before they will accept outgoing email. Some servers block port 25 for email sending, some use domain name resolution (MX record) to validate originator's IP address, or other servers may require a secure TLS/SSL connection. It is for these reasons that the

Email Config screen allows you to specify email options which enable the delivery of email through servers that might otherwise block email service from your Linksys One system.

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Phone Application
Data Devices
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Support View
L1 Devices
Site Status

Home
Install
Site
Users
Individual
Call Targets
Info

Settings
Auto Attendant Hours
Auto Attendant Days
Email Config

Cancel
Commit

Use Email Account On
Other

Host Name
PopularEmail

SMTP Port Number
25

Require SSL To Connect
☐

Use Account Login
☒

Account Username
MyEmail

Account Password
secretpassword

Email 'From' Address
myemail@cisco.com

Send Test Email To:

After you have configured an email account, you can send a test message to ensure that the email settings are correct.

Field	Description
Use Email Account On	Type of email account to use. <b>Note:</b> The options below this field vary depending on the type of account chosen; possible options are described below.
Host Name	Name of the email server.
SMTP Port Number	SMTP server port number. The default port value is 25.
Require SSL To Connect	Checkbox to specify if the email server requires the Secure Socket Layer (SSL) protocol.
Use Account Login	Checkbox to specify if an account username and login is required.
Account Username	Username of the email account. This field can be edited if the "Use Account Login" checkbox is selected.
Account Password	Password of the email account. This field can be edited if the "Use Account Login" checkbox is selected.
Email 'From' Address	Email address shown in the "from" field of the received email.

**To select an email account:**

1. Click the down arrow (▼) in the "Use Email Account On" area.
2. Select an email account to use.
3. Fill out the fields that apply to the type of email account chosen.
4. Click **Commit**.



**To send a test email:**

1. Enter a valid email in the box next to the **Send Test Email To** button.
2. Click **Send Test Email To**.

## Managing Users

The screens in the **Users** tab allow you configure numerous settings for the users of your system. You can add, delete, and change names; configure user's roles and groups; authorize phone usage features (permissions), assign assistants, DIDs, trunks, extensions, and devices. You can also configure SNR (Single Number Reach) settings.

### Assigning Names to Users

The User Directory screen allows you to assign a name with an extension. Changes on this screen may require a restart of the affected phones.

Add User	First Name	Last Name	Internal Number	Unlisted
Delete	Candace	Bismark	704	<input type="checkbox"/>
Delete	Henry	Austin	703	<input type="checkbox"/>
Delete	Jackie	Augusta	702	<input type="checkbox"/>
Delete	Jerry	Denver	700	<input type="checkbox"/>
Delete	Steve	Montgomery	606	<input type="checkbox"/>
Delete	Tammy	Lansing	701	<input type="checkbox"/>

With the Filter Users feature you can view users by name, extension type, device type, group, or role. Click the filter button (+) to select a filter.

Refer to the following table for a description of the information displayed in the User Directory screen.

Field	Description
First Name and Last Name	The name of the user that is associated with an extension and used in the Auto Attendant's directory (for a user to be in the Auto Attendant directory, they should have their name recorded in the voice recording), Local Directory on the users's phone screen, and that appears as the caller ID for internal calls. Both name fields cannot be left blank, a name must be entered in at least the First Name or Last Name field.
Internal Number	The inbound trunk number assigned to the user. Inbound trunk numbers cannot be changed on this screen, refer to the <b>Users &gt; Inbound Trunks</b> screen for inbound trunk definition.
Unlisted	Prevents a user's first and last name from appearing in the Auto Attendant directory and the Local Directory on the phone.

**To add a user:**

1. Click **Add User**.
2. Add a first and last name for the user.
3. Click **Commit**.

**To delete a user:**

1. Click **Delete** in the row of the user to delete.
2. Click **Commit**.

**To change a user's name:**

1. Add or change the first and last name of the user.
2. Click **Commit**.

**To unlist a number from the AA and phone directories:**

1. Click the Unlisted checkbox. A check (☑) appears in the checkbox.
2. Click **Commit**.

**Assigning Users to Groups**

The Group Assignments screen allows you to assign a user to a group; a user can be assigned to multiple groups. Groups are defined and enabled in the **Install > Define Groups** screen.

User	Assistants	Sales	Marketing
Candace Bismarck(704)	☑	☑	
Henry Austin(703)		☑	
Jackie Augusta(702)			☑
Jerry Denver(700)			☑
Steve Montgomery(606)		☑	
Tammy Lansing(701)		☑	



**NOTE:** FXS devices cannot be assigned to a group; this is indicated by a "Not Allowed" banner.

With the Filter Users feature you can view users by name, extension type, device type, group, or role. Click the filter button (+) to select a filter.

**To assign a user to a group:**

1. Click a checkbox (☑) in each group that you want the user to belong.
2. Click **Commit**.



**NOTE:** Group buttons are automatically assigned to available consecutive buttons on the user's phone. If button space is not available on the user's phone, the user template must be adjusted using the **Individual > User Templates** screen.



**NOTE:** Buttons are only assigned if enabled for the group in the **Install > Define Groups** screen.

**Assigning Users to Roles**

The Role Assignments screen allows you to assign a role to a user and assign the priority in which the user's phones will ring in the role. For example, if Sam, Joe, and Terry are assigned as operators, with the priority of 1, 2, and 3 respectively, and someone calls an

operator, then Sam's phone will ring first. If Sam does not answer the call, then Joe's phone will ring; if Joe does not answer the call, then Terry's phone will ring.

Filter Users

+ All = By Name

User

User	Operator (450)	Security
Candace Bismarck(704)	<input type="checkbox"/>	<input type="checkbox"/>
Henry Austin(703)	<input type="checkbox"/>	<input type="checkbox"/>
Jackie Augusta(702)	<input type="checkbox"/>	<input type="checkbox"/>
Jerry Denver(700)	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>
Steve Montgomery(606)	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>
Tammy Lansing(701)	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>



**NOTE:** FXS devices cannot be assigned to a role; this is indicated by a "Not Allowed" banner.

Roles are defined in the **Install > Define Roles** screen.


Filter Users

+ All = By Name

- All
- Alphabetic
- Extension Type
- Device Type
- Group
- Role

With the Filter Users feature you can view users by name, extension type, device type, group, or role. Click the filter button (+) to select a filter.

**To assign a role and priority level to a user:**

1. Click a checkbox (☒) corresponding to the user in a role. A priority box opens for the user and a priority value is automatically assigned to the user.
2. If necessary, assign a priority to the user by clicking on the up-down button () , or by entering a numeric value in the priority box. As priority values are changed for one user, the priority values of other users in the role automatically change.
3. Click **Commit**.



**NOTE:** Role buttons are automatically assigned to available consecutive buttons on the user's phone. If button space is not available on the user's phone, the user template must be adjusted using the **Individual > User Templates** screen.



**NOTE:** Buttons are only assigned if enabled for the group in the **Install > Define Roles** screen.

## Assigning Permissions to Users

The Permissions screen allows you to enable or disable features and to specify feature access and classes of service for a user. Classes of service allow, or restrict, access to specific network services such as long distance, premium content, and international numbers.

User	Has DID	Personal VM	Mobility Feature	Private CLID	Auto-Answer Pages	Forward Offsite	Allow Offsite Calls	Long Distance	International	Premium Srvc	Directory Srvc
Candace Bismarck (704)	Y	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Allowed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Henry Austin (703)	Y	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Jackie Augusta (604)	N	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Jerry Denver (603)	N	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Steve Montgomery (606)	N	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tammy Lansing (605)	N	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

With the Filter Users feature you can view users by name, extension type, device type, group, or role. Click the filter button (+) to select a filter.

These are some examples of services that might be part of a dial plan:

- **Long Distance**—enables or disables long distance calling for this user.
- **International**—enables or disables international calling for this user.
- **Premium Srvc**—enables or disables premium services for this user.
- **Directory Srvc**—enables or disables directory services for this user.

Optional services vary, depending on how the site accounts are set up on the Service Node.

Refer to the following table for a description of the information displayed in the Permissions screen.

Field	Description
User	Name of the user as defined in the User Directory.
Has DID	Indicates whether or not this user's phone number is a DID number (Y for yes, and N for no).

### Rules for Permissions

The following rules apply to the permissions specified in this screen.

*Personal Voicemail (applies to DID and non-DID numbers)*

- If using external voicemail, the Personal voicemail permission checkbox is disabled and cleared for a user with an internal only extension.

### SNR

There is a limit of 25 users who can be concurrently assigned the SNR feature.

If the user is assigned an FXS phone:

- The "Private CLID" box is cleared and disabled for non-DID users.
- The Personal VM and Mobility Feature privilege checkboxes are hidden and replaced with an "N."
- All dial plan specific features, such as long distance, are always allowed; specified by an "Allowed" banner.

### Private CLID

If user does NOT have DID assigned:

- The Private CLID permission checkbox is disabled and cleared.
- For all other users, the Private CLID can be enabled or disabled by selecting or unselecting the Private CLID checkbox.



*Auto-Answer Pages*

One-to-one paging can be enabled or disabled by selecting or unselecting the Auto-Answer Pages checkbox.

*Allow Offsite Calls*

Allows offsite calling when “Allow Offsite Calls” checkbox is selected.



**NOTE:** Users who are assigned an FXS phone are not allowed to forward calls offsite.

If user does NOT have “Allow Offsite Calls” permission (checkbox disabled):

- The SNR permission checkbox is disabled and cleared.
- The “Private CLID” box is hidden and not replaced with anything.
- The “Forward Offsite” permission checkbox is disabled and cleared.
- Dial Plan flags are hidden and services are disabled for the user.

**To specify a feature or class of service for a user:**

1. For each user, click a checkbox (☑) corresponding to the service you want the user to access.
2. Click **Commit**.
3. The system will prompt you to restart the phone for which the service was enabled. Click **Changes Pending** and then **Restart Phone**.

**Assigning SNR to Users**

The SNR (Single Number Reach) screen allows you to specify a number that rings concurrently with the user’s number. For example, if SNR is directed to a user’s cell phone,

then his or her cell phone will ring at the same time that someone calls the user's number. The incoming call is routed to the phone that answers first.

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Help

Filter Users

+ All = By Name

User		Authorize	Enable	Target
Candace Bismarck(704)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	9-214-555-1212
Henry Austin(703)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	9-214-555-1213
Jackie Augusta(702)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	9-214-555-1214
Jerry Denver(700)		<input type="checkbox"/>	<input type="checkbox"/>	
Steve Montgomery(606)		<input type="checkbox"/>	<input type="checkbox"/>	
Tammy Lansing(701)		<input type="checkbox"/>	<input type="checkbox"/>	



**NOTE:** FXS devices cannot be authorized for SNR; this is indicated by a "Not Allowed" banner.

Filter Users

+ All = By Name

- All
- Alphabetic
- Extension Type
- Device Type
- Group
- Role

With the Filter Users feature you can view users by name, extension type, device type, group, or role. Click the filter button (+) to select a filter.

Refer to the following table for a description of the information displayed in the SNR screen.

Field	Description
User	Name and extension of the user as defined in the User Directory.
Authorize	<p>Allows this user to access the SNR feature. If this option is unchecked, then the Enable and Target fields are disabled, and any existing number is cleared. If the Authorize option is disabled, the user will not see the SNR feature in the <b>Individual &gt; User Settings</b> screen. When the Authorized option is enabled, the Enable checkbox becomes selectable and a Target destination can be entered.</p> <p>The Authorize checkbox is mirrored in the <b>Users &gt; Permissions</b> screen (SNR column).</p>
Enable	Enables SNR for this user. This checkbox is mirrored on the <b>Individual &gt; User Setting</b> screen for this user and the <b>Tasks &gt; Call Forwarding / SNR</b> setting on the phone. A target for the call must be specified as defined below.
Target	A multisite or external phone number for the SNR destination. This SNR number is mirrored on the <b>Individual &gt; User Setting</b> screen for this user. <b>Note:</b> Enter a number just as you would dial it from your phone. For example, if the SNR phone number is 214-555-1212 and you normally dial 9 to access an IP Trunk, then the number to enter into the Target field would be 9-214-555-1212.

#### To authorize SNR for a user:

1. For each user, click the Authorize checkbox (☑). The Enable checkbox becomes accessible and this user will see the SNR feature in their **Individual > User Settings** screen.
2. Click **Commit**.

**To enable SNR for a user:**

1. For each user, click an Enable checkbox (☑).
2. Enter an appropriate steering digit and SNR number.
3. Click **Commit**.



**NOTE:** SNR and Mobility buttons are automatically assigned to vacant buttons on the user's phone. If the buttons are not available on the user's phone, the user template must be adjusted using the **Individual > User Templates** screen.



**NOTE:** The SNR button lights green on the user's phone if it has been allocated in the user's template.

## Assigning Assistants to Users

The Assistants screen allows you to assign an assistant to a user. When assistants are assigned to users, three personal extension buttons and the mailbox button for each associated user become available on the assistant's phone (if buttons are available).

User	Assistant
Candace Bismarck(704)	+ None
Henry Austin(703)	+ Candace Bismarck(704)
Jackie Augusta(702)	+ Candace Bismarck(704)
Jerry Denver(700)	+ None
Steve Montgomery(606)	+ None
Tammy Lansing(701)	+ None

With the Filter Users feature you can view users by name, extension type, device type, group, or role. Click the filter button (+) to select a filter.

Before assistants can be assigned to users, they must first be defined as assistants in the **Users > Group Assignments** screen. While the Linksys One Portal does not limit the number of users each assistant can support, there is a practical limit due to the number of buttons on the assistant's phone.

Refer to the following table for a description of the information displayed in the Assistants screen.

Field	Description
User	Name and extension of the user as defined in the User Directory.
Assistant	Name of the assistant assigned to the user.

**To assign an assistant to a user:**

1. For each user, click the more button (+). A list of available assistants appear.
2. Select an available assistant.
3. Click **Commit**.

## Forwarding Calls

The Call Forwards screen allows you to specify call forward options for users. You can also change the number of rings that occur before the call is forwarded. For “Call Forward Busy or No Answer” calls, you can specify the number of rings before forwarding the call.

User	Call Forward Always		Call Forward Busy or No Answer	
	Enable	Target	# Rings	Target
Candace Bismarck(704)	<input type="checkbox"/>	Auto Attendant	4	Personal Voicemail
Henry Austin(703)	<input checked="" type="checkbox"/>	Operator (450)	4	Personal Voicemail
Jackie Augusta(702)	<input type="checkbox"/>	Auto Attendant	4	Personal Voicemail
Jerry Denver(700)	<input type="checkbox"/>	Auto Attendant	4	Personal Voicemail
Steve Montgomery(606)	<input type="checkbox"/>	Auto Attendant	4	Personal Voicemail
Tammy Lansing(701)	<input checked="" type="checkbox"/>	Auto Attendant	4	Personal Voicemail



**NOTE:** For SNR enabled users, 4 rings will be added to the number of rings set in this screen. This is to allow extra time for the SNR target to answer the call before the call is forwarded.

With the Filter Users feature you can view users by name, extension type, device type, group, or role. Click the filter button (⊕) to select a filter.

Refer to the following table for a description of the information displayed in the Call Forwards screen.

Field	Description
Call Forward Always	<p>You can use the Call Forward Always setting to forward all calls to one of the following destinations:</p> <ul style="list-style-type: none"> <li>• <b>Auto Attendant.</b> All incoming calls are forwarded to the Auto Attendant.</li> <li>• <b>Personal Voicemail.</b> All incoming calls are forwarded to personal voicemail.</li> <li>• <b>Group.</b> All incoming calls are forwarded to group extensions. There can be multiple groups.</li> <li>• <b>Role.</b> All incoming calls are forwarded to role extensions. There can be multiple roles.</li> <li>• <b>Operators.</b> All incoming calls are forwarded to the Operators.</li> <li>• <b>VM: Group.</b> All incoming calls are forwarded to group voicemail. There can be multiple groups.</li> <li>• <b>VM: Role.</b> All incoming calls are forwarded to role voicemail. There can be multiple roles.</li> <li>• <b>VM: Operators.</b> All incoming calls are forwarded to the Operator's voicemail.</li> <li>• <b>Extension of.</b> All incoming calls are forwarded the specified extension.</li> <li>• <b>External.</b> All incoming calls are forwarded to an external destination (assuming forward offsite permission at the <b>Users &gt; Permissions</b> screen).</li> </ul>



Field	Description
Call Forward Busy or No Answer	<p>This option determines whether calls routed to a user are forwarded elsewhere if the extension is busy or if there is no answer. You can use the Call Forward Busy or No Answer setting to forward busy or unanswered calls to one of the following destinations:</p> <ul style="list-style-type: none"> <li>• <b>Never.</b> Busy or unanswered calls are not forwarded. All phones with this setting will continue to ring until they are answered.</li> <li>• <b>Auto Attendant.</b> Busy or unanswered calls are forwarded to the Auto Attendant.</li> <li>• <b>Personal Voicemail.</b> Busy or unanswered calls are forwarded to personal voicemail.</li> <li>• <b>Group.</b> Busy or unanswered calls are forwarded to group extensions. There can be multiple groups.</li> <li>• <b>Role.</b> Busy or unanswered calls are forwarded to role extensions. There can be multiple roles.</li> <li>• <b>Operators.</b> Busy or unanswered calls are forwarded to the Operators.</li> <li>• <b>VM: Group.</b> Busy or unanswered calls are forwarded to group voicemail. There can be multiple groups.</li> <li>• <b>VM: Role.</b> Busy or unanswered calls are forwarded to role voicemail. There can be multiple roles.</li> <li>• <b>VM: Operators.</b> Busy or unanswered calls are forwarded to the Operator's voicemail.</li> <li>• <b>Extension of.</b> Busy or unanswered calls are forwarded the specified extension.</li> <li>• <b>External.</b> Busy or unanswered calls are forwarded to an external destination (assuming forward offsite permission at the <b>Users &gt; Permissions</b> screen).</li> </ul>

**To change the Call Forward Always settings:**

1. Click a checkbox (☒) in the Enable column of a user. All calls will be forwarded to the target destination.
2. If necessary, click the options button (+) to specify a different target destination for the forwarded call. If you select the "Extension of" or "External" option, a text box appears in which you can enter a number. If the number is external, you must add a steering digit.
3. Click **Commit**.

**To change the Call Forward Busy or No Answer settings:**

1. Under the # Rings column, click the options button (⊕) for a user and select the number of rings. This specifies how many rings occur before the call is forwarded.
2. Under the Target column, click the options button (⊕) and select a call forward destination. If you select the “Extension of” or “External” option, a text box appears in which you can enter a number. If the number is external, you must add a steering digit.
3. Click **Commit**.

**Assigning Trunks to Users**

The Inbound Trunks screen allows you to assign inbound trunks to users. Each user can be assigned up to three trunks; however, only a DID trunk can be assigned in the Assigned Trunk/Extension column. An Assigned extension can be configured as an extension number only; in this case, the user would only be reachable internally via the Auto Attendant (assuming the the auto attendant is reachable externally) or via an additional forwarded trunk.

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




















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Help

Filter Users

+ All = By Name

**Inbound Trunks**

User	Assigned Trunk/Extension	Additional Forwarded Trunks	Auto Attendant
Candace Bismarck(704)	 12905551004 (704)	  	 12905551000 (700)
Henry Austin(703)	 12905551003 (703)	  	
Jackie Augusta(702)	 12905551002 (702)	  	
Jerry Denver(700)	 603	  	
Steve Montgomery(606)	 606	  	
Tammy Lansing(701)	 605	  	

Filter Users

+ All = By Name

- All
- Alphabetic
- Extension Type
- Device Type
- Group
- Role

With the Filter Users feature you can view users by name, extension type, device type, group, or role. Click the filter button (+) to select a filter.

Notice that a DID trunk object is notched edge on its right side, and a non-DID trunk object is square on its edge. Also notice that there are two types of slots into which the DID and non-DID trunk objects are placed: those with a notched edge and those with a square edge. DID trunk objects can be placed into either type of slot, but non-DID trunk objects can only

be inserted into the square-edged slots. This mechanism ensures that only DID trunks are assigned as “Assigned Trunk/Extension” numbers.



**NOTE:** This screen is related to the **Call Targets > Inbound Trunks** screen; any extensions in the Auto Attendant column will also be in the Auto Attendant column in the **Call Targets > Inbound Trunks** screen. Also, any extensions assigned on either screen are removed from the Auto Attendant extensions.

Refer to the following table for a description of the information displayed in the Inbound Trunks screen.

Field	Description
User	Name and extension of the user as defined in the User Directory.
Assigned Trunk/Extension	The trunk or extension assigned to the user. <b>Note:</b> Only a DID trunk can be assigned as an Assigned Trunk/Extension. For customers using only local trunks, this field only contains a text box to enter a valid extension number.
Additional Forwarded Trunks	Trunks that forward inbound calls to the extension in the “Assigned Trunk/Extension” column.
Auto Attendant	Inbound trunks assigned to the Auto Attendant.

	DID Trunk Object
	non-DID Trunk Object
	DID Trunk Slot
	non-DID Trunk Slot

### To assign a DID trunk to an Assigned Trunk/Extension:

1. Drag the move icon (+) of a DID trunk object anywhere inside a Assigned Trunk/Extension slot.



**NOTE:** When dragging objects to a slot, ensure that the top of the mouse pointer (finger tip) is inside the destination slot.

2. Click **Commit**.

### To assign an Extension number to an Assigned Trunk/Extension (internally reachable number only):

1. Enter a valid extension number in extension area of an Assigned Trunk/Extension.
2. Click **Commit**.

### To assign a non-DID trunk to a user:

1. Drag the move icon (+) of a non-DID trunk object anywhere inside a non-DID slot.



**NOTE:** When dragging objects to a slot, ensure that the top of the mouse pointer (finger tip) is inside the destination slot.

2. Click **Commit**.

### To assign a trunk to an Auto Attendant:

1. Drag the move icon (+) of a trunk object into the Auto Attendant column.
2. Click **Commit**.

## Assigning Devices

The Device Assignments screen allows you to assign a device to a user. Devices are identified by their MAC address, a unique number that is assigned to the device by the manufacturer. The MAC address is written on the device, usually on the bottom.

User	Device	Available
Candace Bismarck(704)	MAC: 00:14:BF:4C:53:BD	MAC: 00:00:00:00:51:81
Henry Austin(703)	MAC: 00:16:B6:6F:05:60	
Jackie Augusta(702)	MAC: 00:16:B6:6F:06:07	
Jerry Denver(700)	MAC: 00:09:37:02:1D:7F	
Steve Montgomery(606)	MAC: 00:16:B6:6F:01:60	
Tammy Lansing(701)	MAC: 00:16:B6:6F:0C:17	

With the Filter Users feature you can view users by name, extension type, device type, group, or role. Click the filter button ( ) to select a filter.

Refer to the following table for a description of the information displayed in the Device Assignments screen.

Field	Description
User	Name and extension of the user as defined in the User Directory.
Device	Devices in the system that are assigned to a user.
Available	Devices that are unassigned.

There are two ways that you can change device assignments: with the move icon (+), or with the right or left direction icons (► or ◀). You can also use a combination of both methods when moving devices.

#### To change device assignments using the move icon:

1. Locate a device that you want to change.
2. Drag the move icon (+) of a device on either the Available column or the Device column. If a device is not assigned to a user, a drop target (⊕) appears in the Device column. You can drop the move icon (+) on this target to move a device to this location.



**NOTE:** To ensure that you move the device to its correct location, drag the move icon to the center of the drop target (⊕) so that the icon fills the target. You can also use the move icon (+) to drag a device from a user to the Available column.

3. If necessary, move other devices as described above.
4. Click **Commit**.

#### To change device assignments using the Direction icons:

1. Click on the right or left direction icons (► or ◀) to move a device assignment.
2. Click **Commit**.



**NOTE:** When moving a device from the Available column, the device is moved to the next available user starting from the top.

## Changing Individual User Settings and Templates

The screens in the **Individual** tab allows you to change settings and templates for users, edit user names, and enable SNR.

## Changing User Settings

The User Settings page allows you to change the first and last name assigned to a user's phone or voice gateway, view and change a user's phone settings including Call Forward Always, and Call Forward Busy or No Answer. You can also enable voicemail box messages to be sent to an e-mail address and configure Single Number Reach (SNR).

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**User**
Candace Bismarck(704)

**First Name**  
Candace

**Last Name**  
Bismarck

**Unlisted**  
☐

Print User Directory
Print Quick Reference

**Call Forward Always**  
Enable
Target
☐
+ Auto Attendant

**Call Forward Busy or No Answer**  
# Rings
Target
☐
+ 4
☐
+ Personal Voicemail

**Voicemail to email forwarding options**  
Enable
Email Address
Mode
☐

☐
+ Notification only



**SNR - Single Number Reach (Enter a number just as you would dial it from this phone)**  
Enable
Number
☒













**NOTE:** For SNR enabled users, 4 rings will be added to the number of rings set in this screen. This is to allow extra time for the SNR target to answer the call before the call is forwarded.

Refer to the following table for a description of the information displayed in the User Settings screen.

Field or Button	Description
User	The User area allows you to select a user to edit. <b>Note:</b> Phones are indicated by the  icon and voice gateways are indicated by the  icon.
First and Last Name	The First and Last Name fields display the name that you selected in the dropdown list box described above. This name was originally entered in the User Directory, however, you can change it here and it will be updated in the User Directory. This name is also the one that appears on the Caller ID.
Unlisted	The Unlisted checkbox allows you to specify whether or not this name appears in any directory listings.
Print User Directory	The Print User Directory button allows you to generate a directory of users. The user directory opens in a browser window; you can print the directory from your browser. Unlisted users do not appear in the directory listing.
Print Quick Reference	The Print Quick Reference button allows you to generate a custom quick reference guide of your phone. The quick reference guide opens in a browser window; you can print the guide from your browser.

## Directory Listing

	Assistants	1
	Marketing	2
	Operator (450)	450
	Sales	2
	Security	2
	fax (477) phone.1st VGA2000	477
	fax (476) phone2.1st VGA2200	476
	fax (475) phone1.1st VGA2200	475
	Auto Attendant	499
	Auto Attendant Admin	498
	Candace Bismarck(704)	12905551004
	Henry Austin(703)	12905551003
	Jackie Augusta(702)	12905551002
	Jerry Denver(700)	12905551000
	Steve Montgomery(606)	606
	Tammy Lansing(701)	12905551001

Field or Button	Description
Call Forward Always Setting	<p>You can use the Call Forward Always setting to forward all calls to one of the following destinations:</p> <ul style="list-style-type: none"> <li>• <b>Auto Attendant.</b> All incoming calls are forwarded to the Auto Attendant.</li> <li>• <b>Personal Voicemail.</b> All incoming calls are forwarded to personal voicemail.</li> <li>• <b>Group.</b> All incoming calls are forwarded to group extensions. There can be multiple groups.</li> <li>• <b>Role.</b> All incoming calls are forwarded to role extensions. There can be multiple roles.</li> <li>• <b>Operators.</b> All incoming calls are forwarded to the Operators.</li> <li>• <b>VM: Group.</b> All incoming calls are forwarded to group voicemail. There can be multiple groups.</li> <li>• <b>VM: Role.</b> All incoming calls are forwarded to role voicemail. There can be multiple roles.</li> <li>• <b>VM: Operators.</b> All incoming calls are forwarded to the Operator's voicemail.</li> <li>• <b>Extension of.</b> All incoming calls are forwarded the specified extension.</li> <li>• <b>External.</b> All incoming calls are forwarded to an external destination (assuming forward offsite permission at the <b>Users &gt; Permissions</b> screen).</li> </ul> <p><b>Note:</b> The External destination is available only if the user has been given permission in the <b>Users &gt; Permissions</b> screen. The External target number must include a steering digit (only IP Trunk, Local Trunk, or Inter-Site steering digits are allowed). If a user does not have a DID extension, then only a Local Trunk will be available for external call forwarding.</p> <p>You can specify how many times the phone rings before it is forwarded.</p>

Field or Button	Description
Call Forward Busy or No Answer Setting	<p>You can use the Call Forward Busy or No Answer setting to forward busy or unanswered calls to one of the following destinations:</p> <ul style="list-style-type: none"> <li>• <b>Never.</b> Busy or unanswered calls are not forwarded. All phones with this setting will continue to ring until they are answered.</li> <li>• <b>Auto Attendant.</b> Busy or unanswered calls are forwarded to the Auto Attendant.</li> <li>• <b>Personal Voicemail.</b> Busy or unanswered calls are forwarded to personal voicemail.</li> <li>• <b>Group.</b> Busy or unanswered calls are forwarded to group extensions. There can be multiple groups.</li> <li>• <b>Role.</b> Busy or unanswered calls are forwarded to role extensions. There can be multiple roles.</li> <li>• <b>Operators.</b> Busy or unanswered calls are forwarded to the Operators.</li> <li>• <b>VM: Group.</b> Busy or unanswered calls are forwarded to group voicemail. There can be multiple groups.</li> <li>• <b>VM: Role.</b> Busy or unanswered calls are forwarded to role voicemail. There can be multiple roles.</li> <li>• <b>VM: Operators.</b> Busy or unanswered calls are forwarded to the Operator's voicemail.</li> <li>• <b>Extension of.</b> Busy or unanswered calls are forwarded the specified extension.</li> <li>• <b>External.</b> Busy or unanswered calls are forwarded to an external destination (assuming forward offsite permission at the <b>Users &gt; Permissions</b> screen).</li> </ul> <p><b>Note:</b> The External destination is only available if the user has been given permission in the <b>Users &gt; Permissions</b> screen. The External target number must include a steering digit (only IP Trunk, Local Trunk, or Inter-Site steering digits are allowed). If a user does not have a DID extension, then only a Local Trunk will be available for external call forwarding.</p> <p>You can specify how many times the phone rings before it is forwarded.</p>

**To select a user:**

1. Click the dropdown list button (▾).
2. Select a name from the list.

**To unlist a user from directory listings:**

- Click the Unlisted checkbox so a check appears (☑).

**To change Call Forward Always settings:**

1. Click the Enable checkbox (☑).
2. Click the target button (+) and choose a Call Forward Always target. If necessary, enter additional extension or external number information.
3. Click **Commit**.

**To Forward Busy or No Answer calls:**

1. Click the “# Rings” button (+) and specify the number of rings that occur before forwarding the call.
2. Click the target button (+) and choose a Call Forward Busy or No Answer setting.
3. Click **Commit**.

**Forwarding Voicemail to E-mail**

Voicemail messages can be forwarded via e-mail. Voicemail box messages are sent as WAV files. Various e-mail options can be assigned to each voicemail box as described below.

Voicemail Box Option	Action
Notification only	When a voicemail message arrives, a notification e-mail is sent to the specified e-mail addresses.
Voicemail attached	When a voicemail message arrives, a notification e-mail with attached voicemail is sent to the specified e-mail addresses.
Voicemail attached and move VM message to 'Saved'	When a voicemail message arrives, a notification e-mail with attached voicemail is sent to the specified e-mail addresses, plus the voicemail message is moved from New Messages to Saved Messages.



**NOTE:** The **Voicemail to email forwarding options** area is not available if the system uses external voicemail or if the user does not have a personal voicemail box (as with a user who is assigned to an FXS device).

### To forward voicemail box messages to e-mail:

1. Click the Email Enable checkbox (☑).
2. Enter an e-mail address in the Email Address area.



**NOTE:** Multiple e-mail addresses can be entered in the Email Address area. Use a comma (,) between e-mail addresses.

3. Select a voicemail box option in the Mode area.
4. Click **Commit** to save your changes.



**NOTE:** This feature may take up to 3 to 5 minutes before forwarding voicemail box messages to e-mail.

### Configuring SNR

The SNR (Single Number Reach) section allows you to specify a number that rings concurrently with the user's number. For example, if SNR is directed to a user's cell phone, then his or her cell phone will ring at the same time that someone calls the user's DID number. The incoming call is routed to the phone that answers first. This section is not

available if SNR is not authorized for this user on the **Users > SNR** or **Users > Permissions** screen.



**NOTE:** The SNR feature is not available for FXS devices.

#### *Enable*

Enables SNR for this user. This checkbox is mirrored on the **Users > SNR** screen and on the **Call Forwarding / SNR** task for this user's phone. A target for the call must be specified as defined below.

#### *Target*

Steering digit and phone number of the SNR destination. This SNR number is mirrored on the **Users > SNR** screen for this user.



**NOTE:** A steering digit must precede the SNR phone number. For example, if the SNR phone number is 214-555-1212 and the steering digit for an IP Trunk is 9, then the number to enter into the Target field would be 9-214-555-1212.

#### **To enable SNR for a user:**

1. For each user, click an Enable checkbox (☑).
2. Enter an appropriate steering digit and SNR number.
3. Click **Commit**.

## 6

The User Template screen allows you to customize the phone and AutoDial features that are available on the user's phone.

Info

Accounts

Phone Application

Data Devices

VAR View

Support View

L1 Devices

Site Status

Home

Install

Site

Users

Individual

Call Targets

Info

User Settings

User Template

User

Candace Bismarck(704)

Help

Print Template

Template

+ Voicemail

Personal Ext

+ Mobility

Personal Ext

+ SNR

Personal Ext

+ Do Not Disturb

+ Redial

+ 1-to-1 Paging

+ Park 1

+ Conference

+ Transfer

+ Headset

Available

Autodial

Name

Number

Autodial

Name

Number

Autodial

Name

Number

Autodial

Name

Number

Autodial

Name

Number

Autodial

Name

Number

Autodial

Name

Number

Autodial

Name

Number

Autodial

Name

Number

Autodial

Name

Number

Autodial

Name

Number

3

Henry Austin(703)

Jackie Augusta(702)

This screen is divided into two areas: the Template area and the Available area. The Template area (located on the left side) shows the current phone and AutoDial feature button assignments.



**NOTE:** The alternating colors in the template indicate left and right side buttons. The Available area (located on the right side) shows the phone and AutoDial features that are available but not currently in use.

Possible features in the user template are defined as shown below. For more information about these feature, refer to the *Linksys One IP Phone User Guide*.

Feature	Function
1-to-1 Paging	Enables 1-to-1 paging call.
After Hours	Enables the user to switch to the after hours message.
Autodial	Enables telephone numbers to be assigned to a button for quick dialing or call transfer. When that button is pushed, it automatically dials that number.
Call Fwd Toggle	Enables all calls to be forwarded to the specified destination before ringing.
Conference	Enables conference calling capability.
Do Not Disturb	Enables the user to disable the phone ringer and call waiting features. Calls get forwarded on no answer to their related destination.
Headset	Switches transmit and receive audio from the handset (or speaker) to the headset.
Mobility	Enables a call to be pushed to the specified number or enables an active call to be pulled back to the user's phone.
Park	Enables a call to be put on hold (parked).
Redial	Enables redial of the last number called.
Role Opt Out	Enables the user to skip calls directed to their role.
SNR	Enables the Single Number Reach function.



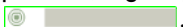
Feature	Function
Surveillance	Enables the surveillance application (optional).
Transfer	Enables the user to transfer a call to another destination.
Voicemail	Enables the user to access voicemail.

### Using Move Icons

You can move and reorder the phone and AutoDial features on your button template as described below.

#### To move an available phone or AutoDial feature to your button template:

1. Locate a phone or AutoDial feature in the Available area.
2. Drag the AutoDial or phone feature, using its move icon (+), so that the top of the mouse pointer (finger tip) falls anywhere on the desired unused template button location



**NOTE:** Some objects may be mapped to multiple buttons. If an object cannot be moved, remove the buttons above and below the intended location.

3. Click **Commit**.

#### To move a phone or AutoDial feature from your button template:


1. Locate a phone or AutoDial feature in your button template.
2. Drag the AutoDial feature, using its move icon (+), to the Available area.



**NOTE:** No more than 12 single button features can be moved to the Available area.

3. Click **Commit**.

**To reorder the button assignments in your button template:**

1. Locate a phone or AutoDial feature in your button template.
2. Drag the AutoDial or phone feature, using its move icon (✚), so that the top of the mouse pointer (finger tip) falls anywhere on the desired unused template button location .
3. Click **Commit**.

**Using Direction Icons**

You can also move a phone or AutoDial features by clicking the right or left direction icons (▶ or ◀).

**To move a phone or AutoDial feature using the Direction icons:**

1. Click on the right or left direction icons (▶ or ◀) to move the feature to the other side.
2. Click **Commit**.



**NOTE:** When moving a feature from the Available area to the Template area, the feature is moved to the next available unused slot starting from the top.



**NOTE:** No more than 12 features can be moved to the Available area.

**Editing AutoDial Features**

You can edit the AutoDial features to contain names and numbers that are assigned to your button template. Note: The numbers entered in the Number field of an AutoDial must include all digits as if they were dialed from your phone. For example, if your normal calling sequence is 9 to reach an outside extension, then 972-555-1212, enter 9-972-555-1212 into the AutoDial Number field.

**To edit AutoDial features:**

1. Click the Name side of the AutoDial feature and enter a name.
2. Click the Number side of the AutoDial feature and enter a phone number.
3. Click **Commit**.

**Printing the Template**

You can print the template from your browser window using Adobe® Reader® software. Download Adobe Reader from <http://www.adobe.com/products/acrobat/readstep2.html>.

**To print your button template:**

1. Click the Print Template button. The application will create a PDF version of your template.
2. Print the template and cut to the correct size.
3. Install the new template on your phone.

**Configuring and Viewing Call Target Information**

The **Call Targets** tab allows you to view group and role definitions, configure voicemail boxes, assign trunks, and configure call forwarding.

## Viewing Group Information

The Groups screen allows you to quickly see relevant information on each group in the system. This screen is informational only; nothing can be changed on this screen.

Group Name	User Count	Ext Definition	VM Box
Assistants	1	---	---
Sales (401)	3	2 buttons, CLID = SITE CLID	voicemail @ 3401
Marketing (402)	2	2 buttons, CLID = SITE CLID	voicemail @ 3402

Refer to the following table for a description of the information displayed in the Groups screen.

Field	Description
Group Name	Name and extension of the group as defined in <b>Install &gt; Define</b> Groups.
User Count	Number of users in each group.
Ext Definition	Definition of the extension showing number of buttons and the CLID. These settings are defined in the <b>Install &gt; Define</b> Groups screen.
VM Box	Destination of a voicemail call. These settings are defined in the <b>Install &gt; Define</b> Groups screen.

## Viewing Role Information

The Roles screen allows you to quickly see relevant information for each role in the system. This screen is informational only; nothing can be changed on this screen.

Role Name	User Count	Ext Definition	VM Box
Operator (450)	2	2 buttons, CLID = SITE CLID	voicemail @ 3450
Security (451)	1	2 buttons, CLID = SITE CLID	voicemail @ 3451

Refer to the following table for a description of the information displayed in the Roles screen.

Field	Description
Role Name	Name and extension of the group as defined in <b>Install &gt; Define Roles</b> .
User Count	Number of users in each role.
Ext Definition	Definition of the extension showing number of buttons and the CLID. These settings are defined in the <b>Install &gt; Define Roles</b> screen.
VM Box	Destination of a voicemail call. These settings are defined in the <b>Install &gt; Define Roles</b> screen.

## Defining System Voicemail Boxes

For groups and roles, the Voicemail Boxes screen allows you to enable the voicemail to e-mail forwarding feature.

The screenshot shows the 'Voicemail Boxes' configuration screen. At the top, there is a navigation bar with tabs: Info, Accounts, Phone Application (selected), Data Devices, VAR View, Support View, L1 Devices, and Site Status. Below this is a sub-navigation bar with tabs: Home, Install, Site, Users, Individual, Call Targets, and Info. Under the 'Call Targets' tab, there are sub-tabs: Groups, Roles, Voicemail Boxes (selected), Inbound Trunks, and Call Forwards. A 'Help' button is located in the top right corner of the main content area.

Call Target	Email Enable	Email Address	Mode
Sales (401)	<input checked="" type="checkbox"/>	<input type="text" value="anybody@cisco.com"/>	Voicemail attached
Marketing (402)	<input type="checkbox"/>	<input type="text"/>	Notification only
Operator (450)	<input type="checkbox"/>	<input type="text"/>	Notification only



**NOTE:** The **Voicemail Boxes** tab is not shown for systems that have external voicemail.

Voicemail box e-mail messages are sent as WAV files. Various e-mail options can be assigned to each voicemail box as described in the table below.

Voicemail Box Option	Action
Notification only	When a voicemail message arrives, a notification e-mail is sent to the specified e-mail addresses.

Voicemail Box Option	Action
Voicemail attached	When a voicemail message arrives, a notification e-mail with the attached voicemail is sent to the specified e-mail addresses.
Voicemail attached and move VM message to "Saved"	When a voicemail message arrives, a notification e-mail with attached voicemail is sent to the specified e-mail addresses, plus the voicemail message is moved from New Messages to Saved Messages.

#### To forward call target voicemail box messages to e-mail:

1. Click the Email Enable checkbox (☑).
2. Enter an e-mail address in the Email Address area.



**NOTE:** Multiple e-mail addresses can be entered in the Email Address area. Use a comma (,) between e-mail addresses.

3. Click the target button (+) and select a voicemail box option in the Mode area.
4. Click **Commit**.



**NOTE:** This feature may take up to 3 to 5 minutes before forwarding voicemail box messages to e-mail.

## Assigning Inbound Trunks to Call Targets

The Inbound Trunks screen allows you to assign inbound trunks to call targets. Each call target can be assigned up to three trunks; however, only a DID trunk can be assigned in the Assigned Trunk column.

Call Target	Assigned Trunk	Additional Forwarded Trunks	Auto Attendant
Sales (401)	12905551002 (702)		12905551000 (700)
Marketing (402)	12905551001 (701)		
Operator (450)	12905551003 (703)		
Security (451)			

Notice that DID trunk objects have rounded edges on their right side, and non-DID trunk objects have square edges on theirs. Also notice that there are two types of slots into which the DID and non-DID trunk objects are placed: those with rounded edges and those with square edges. DID trunk objects can be placed into either type of slot, but non-DID trunk objects can only be inserted into the square-edged slots. This mechanism ensures that only DID trunks are assigned as "Assigned Trunk."



**NOTE:** This screen is related to the **Users > Inbound Trunks** screen; any extensions assigned to the Auto Attendant in this screen will also be assigned to the Auto Attendant in the **Users > Inbound Trunks** screen.

	DID Trunk Object
	non-DID Trunk Object
	DID Trunk Slot
	non-DID Trunk Slot



Refer to the following table for a description of the information displayed in the Inbound Trunks screen.

Field	Description
Call Target	Name of the call target.
Assigned Trunk	Default extension for the group. <b>Note:</b> Only a DID trunk can be assigned as an Assigned Trunk. For customers using only local trunks, this column is not available.
Additional Forwarded Trunks	Trunks that are forwarded to the extension in the “Assigned Trunk” column.
Auto Attendant	Inbound trunks assigned to the Auto Attendant.

**To assign a DID trunk to an Assigned Trunk:**

1. Drag the move icon (+) of a DID trunk object anywhere inside an Assigned Trunk slot.



**NOTE:** When dragging objects to a slot, ensure that the top of the mouse pointer (finger tip) is inside the destination slot.

2. Click **Commit**.

**To assign a non-DID trunk to Call Target:**

1. Drag the move icon (+) of a non-DID trunk object anywhere inside a non-DID slot.



**NOTE:** When dragging objects to a slot, ensure that the top of the mouse pointer (finger tip) is inside the destination slot.

2. Click **Commit**.

### To assign a trunk to an Auto Attendant:

1. Drag the move icon (+) of a trunk object into the Auto Attendant column.
2. Click **Commit**.

## Configuring Call Forward Options

The Call Forwards screen allows you to specify call forward options for specific call targets. For “Call Forward Busy or No Answer” calls, you can specify the number of rings before forwarding and the call.

Info
Accounts
Phone Application
Data Devices
VAR View
Support View
L1 Devices
Site Status

Home
Install
Site
Users
Individual
Call Targets
Info

Groups
Roles
Voicemail Boxes
Inbound Trunks
Call Forwards

Cancel
Commit

Help

Call Target	Call Forward Always		Call Forward Busy or No Answer	
	Enable	Target	# Rings	Target
Sales (3401)	<input checked="" type="checkbox"/>	Auto Attendant	4	Auto Attendant
Marketing (402)	<input type="checkbox"/>	Auto Attendant	4	Auto Attendant
Operator (450)	<input type="checkbox"/>	Auto Attendant	2	Auto Attendant
Security (451)	<input type="checkbox"/>	Auto Attendant	2	Auto Attendant

Refer to the following table for a description of the information displayed in the Call Forwards screen.

Field	Description
Call Forward Always	<p>You can use the Call Forward Always setting to forward all calls to one of the following destinations:</p> <ul style="list-style-type: none"> <li>• <b>Auto Attendant.</b> All incoming calls are forwarded to the Auto Attendant.</li> <li>• <b>VM: Group/Role.</b> All incoming calls are forwarded to the Group or Role voicemail.</li> <li>• <b>Group.</b> All incoming calls are forwarded to group extensions. There can be multiple groups.</li> <li>• <b>Role.</b> All incoming calls are forwarded to role extensions. There can be multiple roles.</li> <li>• <b>Operators.</b> All incoming calls are forwarded to the Operators.</li> <li>• <b>VM: Group.</b> All incoming calls are forwarded to group voicemail. There can be multiple groups.</li> <li>• <b>VM: Role.</b> All incoming calls are forwarded to role voicemail. There can be multiple roles.</li> <li>• <b>VM: Operators.</b> All incoming calls are forwarded to the Operator's voicemail.</li> <li>• <b>Extension of.</b> All incoming calls are forwarded the specified extension.</li> <li>• <b>External.</b> All incoming calls are forwarded to an external destination.</li> </ul>

Field	Description
Call Forward Busy or No Answer	<p>This option determines whether calls routed to a user are forwarded elsewhere if the extension is busy or if there is no answer. You can use the Call Forward Busy or No Answer setting to forward busy or unanswered calls to one of the following destinations:</p> <ul style="list-style-type: none"> <li>• <b>Never.</b> Busy or unanswered calls are not forwarded. All phones with this setting will continue to ring until they are answered.</li> <li>• <b>Auto Attendant.</b> Busy or unanswered calls are forwarded to the Auto Attendant.</li> <li>• <b>VM: Group/Role.</b> Busy or unanswered calls are forwarded to the Group or Role voicemail.</li> <li>• <b>Group.</b> Busy or unanswered calls are forwarded to group extensions. There can be multiple groups.</li> <li>• <b>Role.</b> Busy or unanswered calls are forwarded to role extensions. There can be multiple roles.</li> <li>• <b>Operators.</b> Busy or unanswered calls are forwarded to the Operators.</li> <li>• <b>VM: Group.</b> Busy or unanswered calls are forwarded to group voicemail. There can be multiple groups.</li> <li>• <b>VM: Role.</b> Busy or unanswered calls are forwarded to role voicemail. There can be multiple roles.</li> <li>• <b>VM: Operators.</b> Busy or unanswered calls are forwarded to the Operator's voicemail.</li> <li>• <b>Extension of.</b> Busy or unanswered calls are forwarded the specified extension.</li> <li>• <b>External.</b> Busy or unanswered calls are forwarded to an external destination.</li> </ul>

#### To change the Call Forward Always settings:






1. Click a checkbox (☒) in the Enable column of a call target. All calls will be forwarded to the target destination.
2. If necessary, click the options button (+) to specify a different target destination for the forwarded call. If you select the "Extension of" or "External" option, a text box appears in which you can enter a number. If the number is external, you must add a steering digit.
3. Click **Commit**.

### To change the Call Forward Busy or No Answer settings:

1. Under the # Rings column, click the options button (⊕) for a user and select the number of rings. This specifies how many rings occur before the call is forwarded.
2. Under the Target column, click the options button (⊕) and select a call forward destination. If you select the "Extension of" or "External" option, a text box appears in which you can enter a number. If the number is external, you must add a steering digit.
3. Click **Commit**.

## Viewing System Information



The Inbound Calls screen allows you to quickly see the trunk path for each trunk in the system. This screen is informational only; nothing can be changed on this screen.

Info	Accounts	Phone Application	Data Devices	VAR View	Support View	L1 Devices	Site Status
Home	Install	Site	Users	Individual	Call Targets	Info	
Inbound Calls							
							Help
Call on Trunk	Trunk Type	Are Currently Forwarded To	Will Ring		If Busy or Not Answered, Will Ring		
12905551002	IP DID	--		Sales (401)	Auto Attendant (after 4 rings)		
12905551004	IP DID	--		Candace Bismarck(704)	Personal Voicemail (after 8 rings)		
12905551000	IP DID	--		Auto Attendant	--		
12905551003	IP DID	--		Henry Austin(703)	Personal Voicemail (after 4 rings)		
12905551001	IP DID	--		Marketing (402)	Auto Attendant (after 4 rings)		

Refer to the following table for a description of the information displayed in the Inbound Trunks screen.

Field	Description
Call on Trunk	Number assigned to the trunk.
Trunk Type	Type of trunk. Choices are IP DID or local trunk.
Are Currently Forwarded To	Call forward Always settings as defined in the following screens: <ul style="list-style-type: none"> <li>• <b>Users &gt; Call Forwards</b></li> <li>• <b>Individual &gt; User Settings</b></li> <li>• <b>Call Targets &gt; Call Forwards</b></li> </ul>
Will Ring	Destination of an incoming call on the trunk. The type of destination is shown graphically.
If Busy or Not Answered, Will Ring	Call Forward Busy or No Answer settings as defined in the following screens: <ul style="list-style-type: none"> <li>• <b>Users &gt; Call Forward</b></li> <li>• <b>Individual &gt; User Settings</b></li> <li>• <b>Call Targets &gt; Call Forwards</b></li> </ul>

### “Will Ring” Icons

	Auto Attendant
	User
	Role
	Group
	Fax
	Paging system

# Viewing the Surveillance Application

The Linksys One system provides video surveillance capabilities when equipped with an APP1000 Application Server Appliance and a Linksys Business Series PVC2300 camera. A new tab, Surveillance, automatically appears on the Linksys One Administration interface when the surveillance application is installed.



The Surveillance application on the Administration Interface is like the operation of the Surveillance Application on the phones, refer to the *Video Surveillance Application User Guide* for more details on its operation.

To view the Surveillance application from the Administration interface, the web browser client must be connected to the same subnet (LAN) as the Services Router and the user must be logged in as described in the "Accessing the Linksys One Portal" section on page 4.



**NOTE:** The Surveillance tab will not appear if the application is not running or if you are not logged in as described above.

## Adding a Camera to the Administration Interface

Here's how to access the Video Surveillance Application from the Administration Interface.

1. Click the **Surveillance** tab. The Surveillance Application shows the cameras that are available.
2. Click a camera that you want to monitor.



3. Click Add. The camera is added to **My Cameras**.

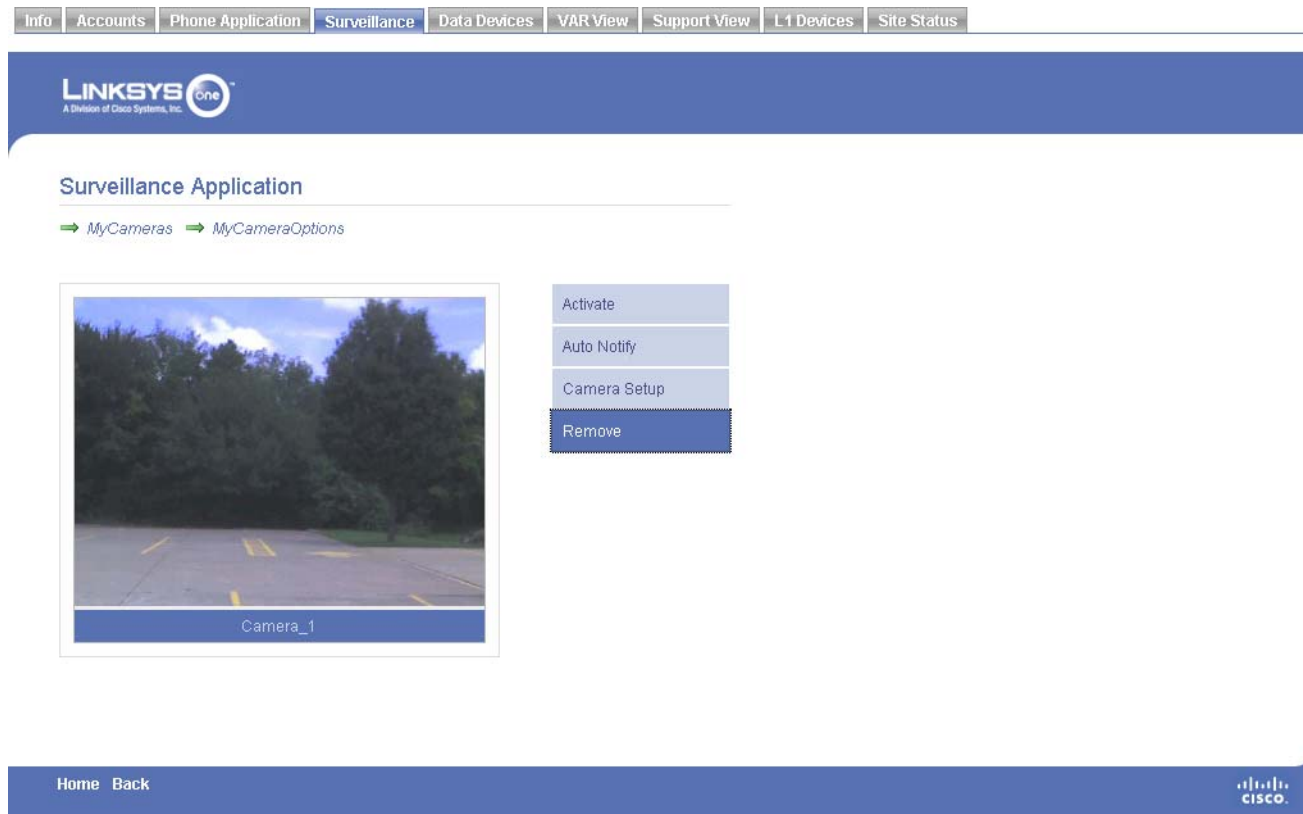


## Removing a Camera from the Administration Interface

You can remove the camera from the Administration Interface as follows.

1. Click the **Surveillance** tab.
2. Click **MyCameras**.
3. Click a camera to remove.

4. Click **Remove**. The camera is removed from MyCameras and is listed under AvailableCameras.

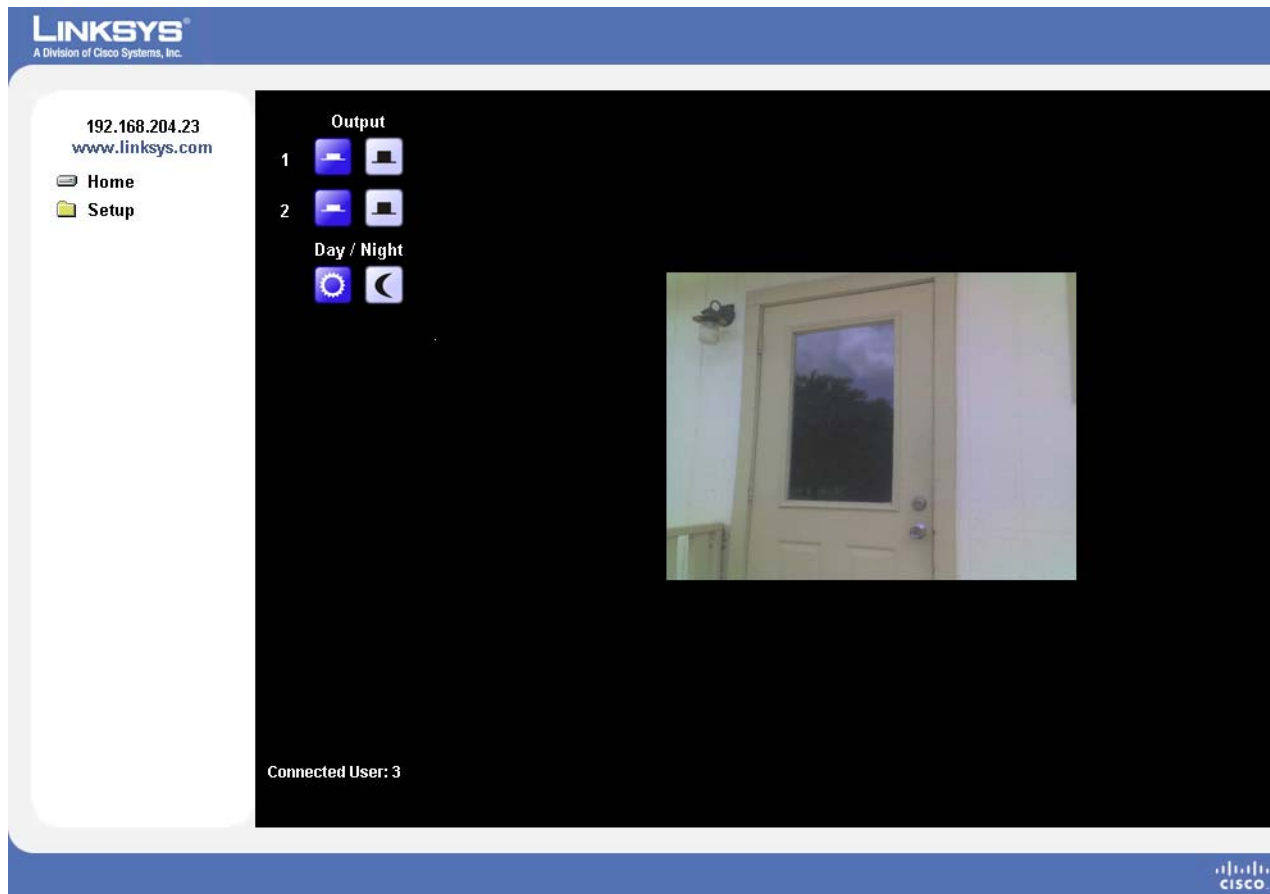


## To Access the Camera Software

You can access additional camera functionality through the software that came with the camera.

1. Click the **Surveillance** tab.
2. Click **MyCamera**.

3. Click a camera.
4. Click **Camera Setup**. A window opens showing the camera software. Refer to the documentation that came with the camera for more details regarding the camera software.



# Managing Data Devices

Data settings prevent unauthorized users from gaining access to your Linksys One network through another network. Data settings are configurable from the **Data Devices** tab in the Linksys One Portal.

These sections help you manage the data devices on your network:

- “Viewing the Status of Data Devices” section on page 94
- “Adding DNS Names for Static IP Devices” section on page 95
- “Allowing Access to Network Services” section on page 96
- “Using the Services Router Advanced Interface” section on page 98

## Viewing the Status of Data Devices

The Status screen lists all data devices that have been assigned an IP address by the Services Router. The Status window is a good way to verify that the Services Router can “see” other devices on the system. If a device is not listed here, it is not communicating with the Services Router. Note that only Dynamic Host Configuration Protocol (DHCP) devices display in this window. If a device does not appear, it may be because it is assigned a static IP address.

**To access the Status window:**

- Click the **Data Status > Status** tab.

You’ll see the following status about data devices on your network:

Item	Description
Hostname	A unique name for the device. Any device connected to the system must have a host name.
IP	The Internet Protocol (IP) address of the device. The IP address is either assigned dynamically using DHCP or you can assign a static IP address on the Static IPs page. Devices assigned a static IP address do not display in this window.

Info	Accounts	Phone Application	Data Devices	VAR View	Support View
Status	Static IP	Firewall	SVR		
Refresh					
Other Data Devices (ixp0.100)					
	Hostname	IP	MAC		
Ping Test	PHM000937020D8E	192.168.10.20	00:09:37:02:0D:8E		
Ping Test	PHM0014BF4C5435	192.168.10.21	00:14:BF:4C:54:35		

Item	Description
MAC	The Media Access Control (MAC) address is the unique identifier for the device. This number is also printed on the device.

## Pinging a Data Device

To ping a device listed in the Status window to verify that it is communicating properly with the Services Router, click the **Ping Test** button. The system pings the device you selected and reports the status.

## Adding DNS Names for Static IP Devices

The Services Router uses Dynamic Host Configuration Protocol (DHCP) for automatically assigning IP addresses to devices on your network. However, if there are network devices that require static IP configuration or if you wish to assign certain permanent devices to be used as servers (for example, a camera) you need to assign a host name and static IP address for them. Here's how:

1. Click the **Data Devices > Static IP** tab.
2. Click **Add Static IP**.
3. Assign a device name and an IP address for each data device. You can assign the same IP address to multiple devices; however, the hostname must be unique.



**IMPORTANT:** Static IP addresses must start with **192.168.101.<nnn>**. The last octet must be in the range 2 to 254. Do not use the same IP address for different devices.

4. When you have finished making your changes, click **Commit**.

## Deleting a Static IP Address

1. Click the **Data Devices > Static IP** tab.

Status Static IP Firewall SVR

Refresh

Other Data Devices (ixp0.100)

	Hostname	IP	MAC
Ping Test	new-host	192.168.204.20	00:00:00:00:51:81

Ping Test Results

PING 192.168.204.20 (192.168.204.20): 56 data bytes --- 192.168.204.20 ping statistics --- 4 packets transmitted, 0 packets received, 100% packet loss

Clear

Info Accounts Phone Application Data Devices VAR View Support View

Status Static IP Firewall SVR

Refresh Commit

LAN Information

Network Mask 255.255.255.0  
Gateway 192.168.101.1  
DNS 1 192.168.101.1  
DNS 2 192.168.101.1

Static IP's

Delete	camera-frontdoor	192.168.101.123
Delete	camera-backdoor	192.168.101.124

Add Static IP

- In the list of Static IP addresses, find the hostname and IP address you want to delete and click **Delete**.
- Click **Commit**.

## Allowing Access to Network Services

The Services Router controls access to a list of the most commonly used services and applications such as e-mail and Web hosting. To allow access to a service, assign a static IP address to the computer that is providing the service (as described in the previous section), enter the device information in the **Static IP** tab, and then enable the static IP address that hosts that service. All incoming network traffic related to that application or service is forwarded to the specified computer.

Info
Accounts
Phone Application
Data Devices
VAR View
Support View
L1 Devices
Site Status

Status
Static IP
Firewall
SVR

Refresh
Commit

### Services

Select the host to be accessible from outside the Firewall for each service. Only one host can be chosen for each service.

Service	Host
HTTP Web Host (Port 80)	None
Site FTP Host (Port 21)	None
HTTPS Web Host (Port 443)	None
Site SSH Host (Port 22)	None
Site Telnet Host (Port 23)	None
SMTP Email Host (Port 25)	None
POP3 Email Host (Port 110)	None
IMAP Email Host (Port 143)	None

### DMZ

The DMZ is a designated host that will receive inbound traffic from the WAN that does not match the list above.

None

You can allow access to the following network services and applications:

Port	Description
HTTP Web Host (Port 80)	Select the host name of the device that you want to serve standard Web pages.
Site FTP Host (Port 21)	Select the host name of the device that you want to act as a File Transfer Protocol (FTP) server.

Port	Description
HTTPS Web Host (Port 443)	Select the host name of the device that you want to serve secure (encrypted) Web pages.
Site SSH Host (Port 22)	Select the host name of the device that you want to act as a Secure Shell (SSH) server. SSH provides remote connections to the server and uses encryption for a secure connection.
Site Telnet Host (Port 23)	Select the host name of the device to which you want to provide telnet access. Telnet access provides a command line login session with the server. Telnet sessions are not encrypted.
SMTP E-mail Host (Port 25)	Select the host name of the device that you want to act as a Simple Mail Transfer Protocol (SMTP) host. SMTP allows users to send E-mail from the server.
POP3 E-mail Host (Port 110)	Select the host name of the device that you want to act as a Post Office Protocol version 3 (POP3) host. POP3 allows users to retrieve E-mail from the server.
IMAP E-mail Host (Port 143)	Select the host name of the device that you want to act as an Internet Message Access Protocol (IMAP) host. IMAP allows users to access E-mail on the server.

Here's how to use the Linksys One Portal to configure the firewall for permitting a data device:

1. Define a static IP address for each device or service. See the "Adding DNS Names for Static IP Devices" section on page 95.
2. Click the **Data Devices > Firewall** tab.
3. For each service, select the IP address of the host server to be accessible from outside the firewall. Only one host server can be chosen for each service.
4. Click **Commit**. Your changes takes effect immediately.

When Internet users point their browser to the external IP address for the Services Router, the incoming requests for this service are forwarded to the specified Web server.

## Exposing a Network Device as a DMZ Host

You can allow access to a network device that you want to act as a network Demilitarized Zone (DMZ) host. The DMZ is a dedicated host that receives all inbound traffic from the WAN with one exception: it does not receive traffic directed to the host servers and services configured in the Firewall Management window. A DMZ host also does not receive traffic related to LAN-side initiated connections to the Internet. These connections are managed dynamically at the firewall. The DMZ host receives all of the “unsolicited” inbound traffic from the Internet that isn’t specifically configured to go to other network servers.

When a server is a DMZ host, it can receive any inbound traffic from the Internet, and it is treated by the Linksys One network as being outside of the firewall. This option should only be used if you need hosting services that are not listed above and understand the security implications of a DMZ host.



**IMPORTANT:** A Demilitarized Zone (DMZ) host is not protected by the firewall and may be vulnerable to attack. Designating a DMZ host can also put other computers in the network at risk. When designating a DMZ host, consider the security implications and protect the network if necessary.

### To expose a network server as a DMZ host:

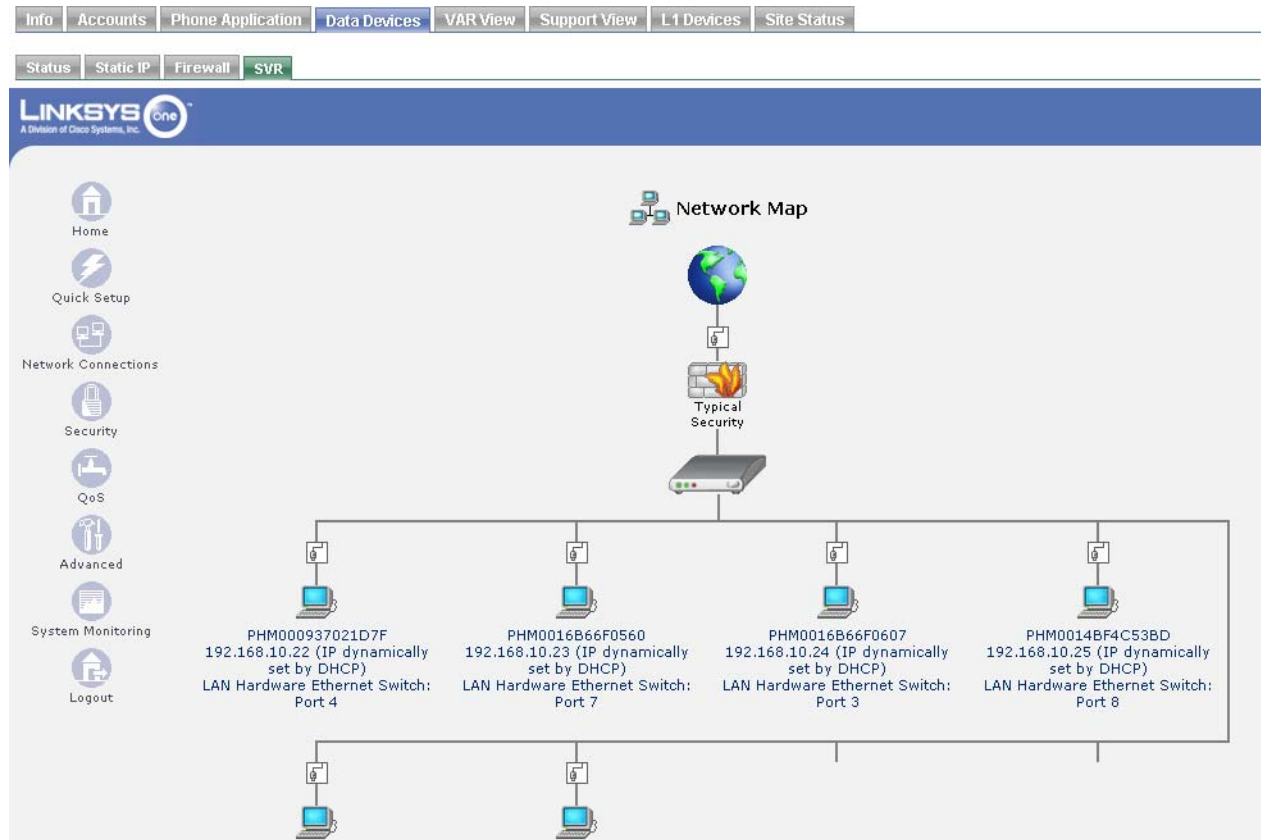
1. Define a static IP address for each device or service. See the “Adding DNS Names for Static IP Devices” section on page 95.
2. Click the **Data Devices > Firewall** tab.
3. Select the IP address for the Site DMZ host drop-down box.
4. Click **Commit**. Your change takes effect immediately.

## Using the Services Router Advanced Interface

The **Data Devices > SVR** tab opens the Services Router advanced interface. For more details on using this interface, refer to the *CPE Advanced Administration Guide*, available on the



Linksys Partner Connection (LPC) portal. for information on how to access the LPC portal, refer to the "Linksys Partner Connection Portal" section on page 137.



**CAUTION:** Unauthorized changes in the Services Router Advanced interface may cause a system failure.

# Using the VAR View Screens

The VAR View screens allows you, as a Value Added Reseller (VAR), to make connectivity changes to the Services Router, view the maintenance status of your system, restore from backups, and view “snapshots” of devices in your Linksys One network.

These sections help you manage the Service Node devices on your network:

- “Changing the Services Router Connectivity Settings” section on page 100
- “Viewing the Maintenance Status” section on page 101
- “Backing up and Restoring your Services Router” section on page 103
- “Changing a Service Node Account” section on page 103
- “Viewing Device Snapshots” section on page 104
- “Configuring Wireless” section on page 105

## Changing the Services Router Connectivity Settings

By default, the Services Router automatically receives its IP address through DHCP, but it can be configured with a static IP address or Point-to-Point over Ethernet (PPPoE). The Custom option allows you to select another device for expanded connectivity.



**NOTE:** The Connectivity settings DHCP, StaticIP, and PPPoE only apply to **WAN1** port.

To change the Services Router connectivity settings to DHCP:

1. Click the **VAR View > Install/Connectivity** tab.
2. Click the **DHCP** button.
3. Click **Commit and Reboot**.

Info
Accounts
Phone Application
Data Devices
**VAR View**
Support View
L1

Install/Connectivity
Maintenance
SN Backups
SN Account
Device Snapshots

### Configure Voice Interface Connectivity (SVR3000)

WAN Ethernet W1
Status: OK

☒ DHCP

IP Address
Subnet Mask
255
255
255
0
Default Gateway
0
0
0
0
DNS Servers

☐ StaticIP

☐ PPPoE

User Name
Password

Other
☐ Custom
none

Commit and Reboot

**To change the Services Router connectivity settings to StaticIP:**

1. Click the **VAR View > Install/Connectivity** tab.
2. Click the **StaticIP** button.
3. Enter IP Address, Subnet Mask, Default Gateway, and DNS Servers information.
4. Click **Commit and Reboot**.

**To change the Services Router connectivity settings to PPPoE:**

1. Click the **VAR View > Install/Connectivity** tab.
2. Click the **PPPoE** button. Enter a username and password.
3. Click **Commit and Reboot**.

**To change the Services Router connectivity settings to a custom setting:**

**CAUTION:** Changes to the Custom option may cause a system failure. Only make changes in this interface as directed by Linksys One.

1. Click the **VAR View > Install/Connectivity** tab.
2. Click **Custom**. Select a custom device from the drop down list.
3. Click **Commit and Reboot**.

## Viewing the Maintenance Status

The Maintenance screen allows you to view the status of the last maintenance operation of the Services Router. This screen shows the date and time that the last maintenance was started, completed, its status, and the time that the next maintenance operation will begin. You can also force the maintenance operation to start immediately.

Info	Accounts	Phone Application	Data Devices	<b>VAR View</b>	Support View	L
------	----------	-------------------	--------------	-----------------	--------------	---

Install/Connectivity	<b>Maintenance</b>	SN Backups	SN Account	Device Snapshots
----------------------	--------------------	------------	------------	------------------

[Refresh](#)

**Maintenance Status**

Last Maintenance Started	Fri May 4 15:07:10 2007
Last Maintenance Completed	Fri May 4 02:41:29 2007
Last Maintenance Status	Backup to SN Started.

Next Maintenance Tomorrow after 14:18 [Start Maintenance Now](#)

Refer to the following table for a description of the information displayed in the Maintenance screen.

Field	Description
Last Maintenance Started	The date and time that the last maintenance operation was started on the Services Router.
Last Maintenance Completed	The date and time that the last maintenance operation was completed on the Services Router.
Last Maintenance Status	The status of the last maintenance operation that was completed on the Service Router.
Next Maintenance	The time that the next maintenance operation will be performed on the Services Router.

**To view the maintenance status of the Services Router:**

- Click the **VAR View > Maintenance** tab.

**To immediately the start maintenance operation on the Services Router:**

1. Click the **VAR View > Maintenance** tab.
2. Click **Start Maintenance**.

## Backing up and Restoring your Services Router

You can backup your CPE database to the Service Node and restore it from a previously backed-up version. Normally, regular backups are performed during the daily maintenance window, however, you can initiate a backup at any time. The Service Node stores only the last five backups; older ones are deleted automatically.



**CAUTION:** If your system settings are more recent than the backup settings, your current settings will be lost. Your system will reset which may affect your applications and services.

### To restore from a Service Node backup:

1. Click the **VAR View > SN Backups** tab.
2. In the list of database backup versions, select the database version that you would like to install.
3. Click **Restore** to immediately install the selected backup version on the Services Router. Your system will reset which may affect your applications and services.

### To delete a backup from the Service Node:

1. Click the **VAR View > SN Backups** tab.
2. Click **Delete**. The backup will be removed from the Service Node.

### To backup immediately to the Service Node:

1. Click the **VAR View > SN Backups** tab.
2. Click **Backup Now**. The backup process will begin; click **Refresh** to see the last backup date and time.

## Changing a Service Node Account

You can change and test the Service Node account information of your customer from the SN Account screen.

Info	Accounts	Phone Application	Data Devices	<b>VAR View</b>	Support View	Log Out
Install/Connectivity	Maintenance	<b>SN Backups</b>	SN Account	Device Snapshots		

### Restore a Backup from the SN

[Refresh](#)

**If your system settings are more recent than the backup settings, your current settings will Choose 'Restore' below to replace your system settings with the selected backup version.**

**Your system will reset which may affect your applications and services.**

[Backup Now](#)

Backup Date	Commands	
04/30/2007 02:10:17	<a href="#">Restore</a>	<a href="#">Delete</a>
05/01/2007 02:02:36	<a href="#">Restore</a>	<a href="#">Delete</a>
05/02/2007 02:26:27	<a href="#">Restore</a>	<a href="#">Delete</a>
05/03/2007 02:34:32	<a href="#">Restore</a>	<a href="#">Delete</a>
05/04/2007 16:08:25	<a href="#">Restore</a>	<a href="#">Delete</a>

Info	Accounts	Phone Application	Data Devices	<b>VAR View</b>	Support View	Log Out
Install/Connectivity	Maintenance	SN Backups	<b>SN Account</b>	Device Snapshots		

### Make SN Account Changes

**CAUTION:** changes may adversely affect service.

Service Provider ID:	<input type="text" value="00000000111"/>	<a href="#">Commit and Restart</a>
Customer Number:	<input type="text" value="8000"/>	
Password:	<input type="text" value="123123"/>	
<a href="#">Test</a>		

This feature provides a way to manually migrate a single customer account from one Service Node to another.



**CAUTION:** This feature should be used only under the direction of Linksys One Technical support.

**To change the account information of your customer:**

1. Click the **VAR View > SN Account** tab.
2. Type a new Service Provider ID, Customer Number, and Password.
3. Click **Commit and Restart**. Your system will reset which may affect your applications and services.

To test your customer's account, click **Test**. A window will open and display the results of the test.

## Viewing Device Snapshots

The Services Router collects logs of the network and device status. In the event you need to contact Linksys One support to troubleshoot a problem, the support engineer may ask you to send them these logs for debugging purposes. Here's how you do that:

Info	Accounts	Phone Application	Data Devices	<b>VAR View</b>	Support View	L1 Devices	Site Status
------	----------	-------------------	--------------	-----------------	--------------	------------	-------------

Install/Connectivity	Maintenance	SN Backups	SN Account	<b>Device Snapshots</b>
----------------------	-------------	------------	------------	-------------------------

Collect a Device's "Snapshot" view

Send a "Snapshot" of  to E-mail address:

1. Click the **VAR View > Device Snapshots** tab.
2. Choose the IP address for the device from the Send Snapshot drop down box.
3. Type the e-mail address of the support engineer in the "to E-mail address" field.
4. Click **Send**.

## Configuring Wireless

The SVR200 has 802.11 wireless capabilities; you can configure wireless settings from the Configure Wireless screen.

**To enable wireless capabilities on the SVR200:**

1. Click the **VAR View > Configure Wireless** tab.
2. Click the Enable Wireless checkbox. The screen changes to include more options.
3. Type an SSID for the SVR.
4. Select a mode for 802.11.
5. Select a Security Type.
6. Click **Submit**.

### Wireless Terminology

**802.11B:** a wireless networking standard that specifies a maximum data transfer rate of 11Mbps and an operating frequency of 2.4GHz.

**802.11G:** a wireless networking standard that specifies a maximum data transfer rate of 54Mbps, an operating frequency of 2.4GHz, and backward compatibility with 802.11B devices.

**802.11 B/G Mixed:** Both Wireless-B and Wireless-G client devices can be connected at their respective data rates.

**SSID:** Service Set Identifier. The name of your wireless network.

**WEP:** Wired Equivalent Privacy. WEP is a security protocol, specified in the IEEE Wireless Fidelity Wi-Fi standard, that is designed to provide a wireless local area network with a level of security and privacy comparable to what is usually expected of a wired LAN.

# Using the Support View Screens

The Support View screens allow you to view the current configuration and status values of your Linksys One system.

These sections help you to view the Support View screens:

- “Changing a Service Node Account” section on page 107
- “Backing Up and Restoring Your CPE Configuration” section on page 108
- “Viewing Provisioning Settings” section on page 109
- “Viewing Device Snapshots” section on page 110
- “Changing the Services Router Connectivity Settings” section on page 112
- “Viewing VPN Status” section on page 114
- “Displaying Services Router Information” section on page 115
- “Viewing the Maintenance Status” section on page 118
- “Re-imaging the CPE” section on page 119
- “Restarting All Phones” section on page 119
- “Viewing Phone Device Data” section on page 120



In the Support View screens you can display information on the Services Router, devices, users, and other information.

Info Accounts Phone Application Data Devices VAR View **Support View** L1 Devices Site Status

Service Node  
Account  
Backups  
Provisioning

VAR  
Snapshots  
Connectivity

WAN  
SVR  
Force CPE Re-Image  
Reboot SVR  
Restart All Phones  
VPN Status  
Release Info  
Maintenance

Phone Devices  
Users Lines Devices  
Call Targets  
Other Tables

**Make SN Account Changes**

CAUTION: changes may adversely affect service.

Service Provider ID: 012345678901  
Customer Number: 1234  
Password: 123456

Commit and Restart

Test



**NOTE:** In this screen, there may be a delay between the time you click an option and the time it displays. This delay is normal behavior.

## Changing a Service Node Account

You can change and test the Service Node account information of your customer from the Account screen.

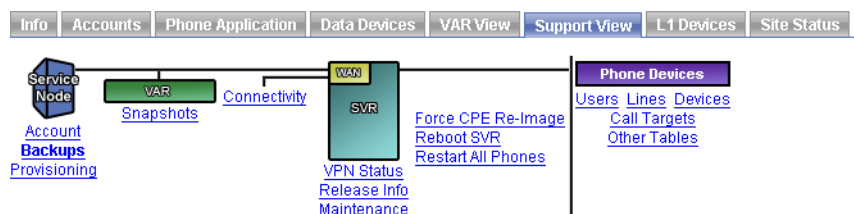
**To change the account information of your customer:**

1. Click **Account**.
2. Type a new Service Provider ID, Customer Number, and Password.
3. Click **Commit and Restart**. Your system will reset which may affect your applications and services.

To test your customer's account, click **Test**. A window will open and display the results of the test.

## Backing Up and Restoring Your CPE Configuration

You can backup your CPE database to the Service Node and restore it from a previously backed-up version. Normally, regular backups are performed during the daily maintenance window, however, you can initiate a backup at any time. The Service Node stores only the last five backups; older ones are deleted automatically.



### Restore a Backup from the SN

Refresh

If your system settings are more recent than the backup settings, your current settings will be lost. Choose 'Restore' below to replace your system settings with the selected backup version.

Your system will reset which may affect your applications and services.

Backup Now

Backup Date	Commands	
05/06/2007 02:52:09	Restore	Delete
05/07/2007 02:12:51	Restore	Delete
05/08/2007 02:51:44	Restore	Delete
05/09/2007 02:23:13	Restore	Delete
05/10/2007 02:37:38	Restore	Delete



**CAUTION:** If your system settings are more recent than the backup settings, your current settings will be lost. Your system will reset which may affect your applications and services.

To restore from a Service Node backup:

1. Click the **VAR View > SN Backups** tab.

2. In the list of database backup versions, select the database version that you would like to install.
3. Click **Restore** to immediately install the selected backup version on the Services Router. Your system will reset which may affect your applications and services.

**To delete a backup from the Service Node:**

1. Click the **VAR View > SN Backups** tab.
2. Click **Delete**. The backup will be removed from the Service Node.

**To backup immediately to the Service Node:**

1. Click the **VAR View > SN Backups** tab.
2. Click **Backup Now**. The backup process will begin; click **Refresh** to see the last backup date and time.

## Viewing Provisioning Settings

The Provisioning window displays provisioning and dialplan information about your Linksys One phone system.

Refer to the following table for a description of the information displayed in the **Provisioning** window.

**Viewing Provisioning Information on the Linksys One Network**

Field	Description
Locale	The currently selected customer locale
Remote Domain	Domain name of the brand
Local Domain	Domain name of the Customer
CAC	Maximum number of concurrent external IP calls allowed, Call Admission Control
Codec	Default codec

Field	Description
Lines	Shows assigned customer phone numbers
IPsec Tunnel for Voice	Status of the IPsec tunnel
Dialplan Patterns	Shows the current dialplan
Service Provider	Description field from the default Internet Telephony Service Provider (ITSP) defined for this brand on the Service Node
Data VLAN	IP address of the data VLAN
Site DID Prefix	Root of DID numbers
Site DID Mask Length	Dialing format
Sites	List of other sites
VPN Members	List of VPN members

## Viewing Device Snapshots

The Services Router collects logs of the network and device status. In the event you need to contact Linksys One support to troubleshoot a problem, the support engineer may ask you to send them these logs for debugging purposes. Here's how you do that:

The screenshot displays the 'Support View' tab in the Linksys One management interface. The top navigation bar includes tabs for Info, Accounts, Phone Application, Data Devices, VAR View, Support View (selected), L1 Devices, and Site Status. The main content area is divided into three sections:

- Service Node:** Contains links for Account, Backups, Provisioning, and a 'Collect a Device's "Snapshot" view' section.
- VAR:** Contains a link for Snapshots.
- Connectivity:** Contains a link for Connectivity.
- SVR:** Contains links for VPN Status, Release Info, Maintenance, Force CPE Re-Image, Reboot SVR, and Restart All Phones.
- Phone Devices:** Contains links for Users, Lines, Devices, Call Targets, and Other Tables.

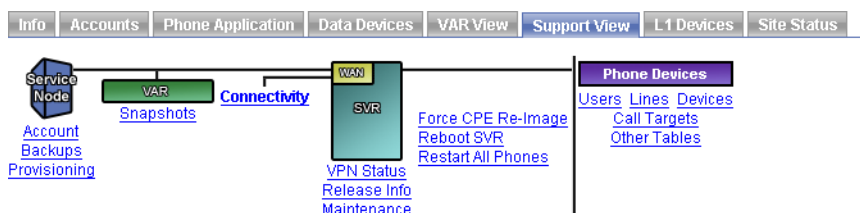
At the bottom, there is a form to send a snapshot. It includes a dropdown menu for selecting a device (currently showing '192.168.204.1 - 00:14:BF:4C:5C:B9 - SVR') and a text field for the email address (currently showing 'email@cisco.com'). A 'Send' button is located to the right of the email field.

**To view device snapshots:**

1. Click **Snapshots**.
2. Choose the IP address for the device from the Send Snapshot drop down box.
3. Type the e-mail address of the support engineer in the “to E-mail address” field.
4. Click **Send**.

## Changing the Services Router Connectivity Settings

By default, the Services Router automatically receives its IP address through DHCP, but it can be configured with a static IP address or Point-to-Point over Ethernet (PPPoE). The Custom option allows you to select another device for expanded connectivity.



### Configure Voice Interface Connectivity (SVR3000)

WAN Ethernet W1 Status: OK

☒ DHCP

☐ StaticIP

☐ PPPoE

☐ Other

☐ Custom

IP Address				
Subnet Mask	255	255	255	0
Default Gateway	0	0	0	0
DNS Servers				

User Name

Password

none

[Commit and Reboot](#)



**NOTE:** The Connectivity settings DHCP, StaticIP, and PPPoE only apply to **WAN1** port.

To change the Services Router connectivity settings to DHCP:

1. Click **Connectivity**.
2. Click the **DHCP** button.
3. Click **Commit and Reboot**.

**To change the Services Router connectivity settings to StaticIP:**

1. Click **Connectivity**.
2. Click the **StaticIP** button.
3. Enter IP Address, Subnet Mask, Default Gateway, and DNS Servers information.
4. Click **Commit and Reboot**.

**To change the Services Router connectivity settings to PPPoE:**

1. Click **Connectivity**.
2. Click the **PPPoE** button. Enter a username and password.
3. Click **Commit and Reboot**.

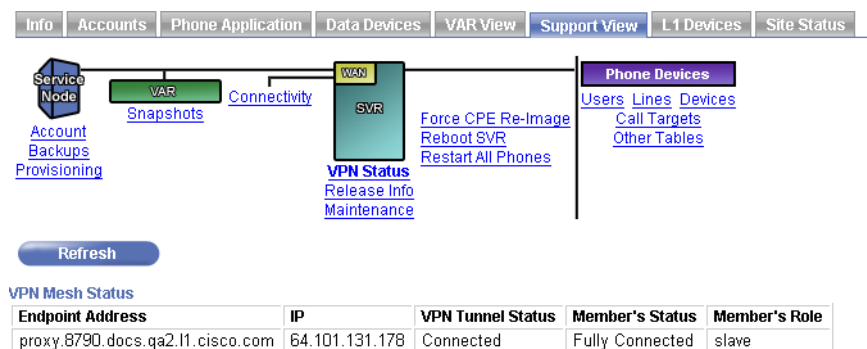
**To change the Services Router connectivity settings to a custom setting:**

**CAUTION:** Changes to the Custom option may cause a system failure. Only make changes in this interface as directed by Linksys One.

1. Click **Connectivity**.
2. Click **Custom**. Select a custom device from the drop down list.
3. Click **Commit and Reboot**.

## Viewing VPN Status

If the Services Routers is part of a VPN mesh, the VPN Status window shows its status.



To view the VPN status, click **VPN Status**.

Refer to the following table for a description of the information displayed in the **VPN Status** window.

### Viewing VPN Mesh Status Information on the Linksys One Network

Field	Description
Endpoint Address	Domain name for the endpoint (generated by the Service Node)
IP	IP address of the endpoint
VPN Tunnel Status	Status of the VPN tunnel
Member's Status	Status of the member
Member's Role	Member role: either master or slave. The master member controls the maintenance hour for the slave members.



## Displaying Services Router Information

The Release Info screen displays the MAC address, IP address, status information for the Services Router, VAR, and Release information. Additionally, it includes actions for Administering the Services Router: you can clean and reinstall the current software release, clean customer information, and restart the SVR.

Info Accounts Phone Application Data Devices VAR View **Support View** L1 Devices Site Status

Service Node  
Account Backups Provisioning

VAR  
Snapshots

Connectivity

WAN  
SVR  
Force CPE Re-Image  
Reboot SVR  
Restart All Phones  
VPN Status  
**Release Info**  
Maintenance

Phone Devices  
Users Lines Devices  
Call Targets  
Other Tables

Refresh

SVR3000

**MAC** 00:14:BF:4C:5C:B9  
**IP** 64.101.131.78  
**Last Started** Thu May 10 15:45:08 2007  
**VAR Info** Documentation System  
123 Main Street  
Richardson, TX 75082 us  
**Release** L1\_2.0.0.0

HAVE_OWNER	<a href="#">Clean and redo install (SVR will restart)</a>
HAVE_VALID_IMAGE	<a href="#">Clean Customer Info and Account (SVR will restart)</a>
HAVE_SN_DATA	<a href="#">Reboot SVR</a>
CP_RUNNING	
Doing: CP_RUNNING	
WAN Status: OK	
SN Status: OK	

## Viewing the IP Address and MAC Address

To find out the IP address for the WAN port on the Services Router, click **Release Info**. The IP address is displayed. The MAC address and Last Started date and time are also displayed as shown below.

Field	Description
MAC	Displays the WAN-side MAC address of the Services Router
IP	Displays the WAN-side IP Address of the Services Router (manually assigned or received through DHCP)
Last Started	Displays the last time the Services Router was rebooted, shown in date and time
VAR Info	Displays the contact information for the VAR
Release	Version number for the call processing software running on the Services Router

## Cleaning User Information from the Services Router



**CAUTION:** Clicking the **Clean and redo install** command will clean (delete) all user information from the Services Router. However, this command will not initiate a handshake process.

### To clean and restart the Services Router:

- Click **Clean and redo install (SVR will restart)**.

This command will clear the user specific-information off the Services Router and restart the Services Router.

## Cleaning the Customer and Account Information from the Services Router



**CAUTION:** Clicking the **Clean Customer Info and Account** command will clean (delete) customer and account information from the Services Router and reset it to its default settings. This command will initiate a handshake process.

**To clean Customer and Account Information and restart the Services Router:**

- Click **Clean Customer Info and Account (SVR will restart)**.

This command will clear the customer and account specific-information off the Services Router and restart the Services Router.

### Restarting the Services Router

If you make site-wide changes to the database, you can immediately restart the Services Router and implement the changes. The Services Router (and all phones on the network) will briefly reboot as the changes take effect.

**You can also restart the Services Router through the Support View screen as follows:**

- Click **Reboot SVR** to restart the Services Router.

Alternatively, you can cycle power on the Services Router by doing either one of the following:

- Press the **RESET** button on the Services Router for less than 2 seconds OR
- Unplug the power cord and then plug the power cord back in.



**IMPORTANT:** You will not lose your configuration if you cycle power.



**NOTE:** The **SYSTEM** button on the SVR3000 Services Router does not reboot the Services Router.

## Viewing the Maintenance Status

The Maintenance screen allows you to view the status of the last maintenance operation of the Services Router. This screen shows the date and time that the last maintenance was started, completed, its status, and the time that the next maintenance operation will begin. You can also force the maintenance operation to start immediately.

**Maintenance Status**

Last Maintenance Started Thu May 10 02:37:26 2007  
 Last Maintenance Completed Thu May 10 03:24:35 2007  
 Last Maintenance Status CPE Maintenance (Updated Release) Succeeded

Next Maintenance Tomorrow after 2:55 [Start Maintenance Now](#)

Refer to the following table for a description of the information displayed in the Maintenance screen.

Field	Description
Last Maintenance Started	The date and time that the last maintenance operation was started on the Services Router.
Last Maintenance Completed	The date and time that the last maintenance operation was completed on the Services Router.

Field	Description
Last Maintenance Status	The status of the last maintenance operation that was completed on the Service Router.
Next Maintenance	The time that the next maintenance operation will be performed on the Services Router.

**To view the maintenance status of the Services Router:**

- Click **Maintenance**.

**To immediately the start maintenance operation on the Services Router:**

1. Click **Maintenance**.
2. Click **Start Maintenance**.

## Re-imaging the CPE



**CAUTION:** Clicking **Force CPE Re-Image** will delete all information from the Services Router and reset it to its default settings. This command will initiate a handshake process.

**To re-image the Services Router:**

- Click **Force CPE Re-Image**. The Services Router will be reset to its factory default settings.

## Restarting All Phones

You can force all phones in the system to restart immediately by clicking **Restart All Phones**. This may be necessary if you have pending changes that you to want take effect after the phones have restarted.

## Viewing Phone Device Data

The options under Phone Devices allows you to view various databases used for User, Lines, Devices, and Call Targets. This information may be useful in troubleshooting the Linksys One system.

# Viewing Linksys One-Ready Devices

The Linksys One Devices screen allows you to view any Linksys One-ready devices that are attached to the Linksys One system.



**NOTE:** Each Linksys One Ready device has its own interface and suite of documentation. For details on how to install and administer a Linksys One Ready product, go to [www.linksys.com](http://www.linksys.com) and search for the product name or model number.

These sections help you to view the L1 Devices screens:

- "Displaying Devices" section on page 121
- "Showing Details" section on page 125
- "Showing Syslogs" section on page 126

## Displaying Devices


The L1 Devices tab shows the Linksys One-ready devices that are attached to your system, plus, it shows the health of each device. The devices are listed on the left side of the window and details about the selected device are shown on the right side of the window. To select a


device, simply click on the device in the list. Click the **Refresh** button to refresh the list of devices.

[Info](#)
[Accounts](#)
[Phone Application](#)
[Data Devices](#)
[VAR View](#)
[Support View](#)
[L1 Devices](#)
[Site Status](#)

All

Refresh


BSP0016B66FAB90


BSP0016B6700F08

**Device Info (BSP0016B66FAB90)**  

Class	switch	Model	SFE2000P
Serial Number	DNI1026000B	Hardware Version	00.00.0c
Software Version	1.0.0.48	IP Address	192.168.140.22
Management Version	1.0	Status	ok
Mac Address	0016b66fab90	Host Name	BSP0016B66FAB90

[Show\\_Details](#)
[Show\\_Syslogs](#)

**Device Commands**  

password	<input type="text"/>	<a href="#">ChangePassword</a>
hostName	<input type="text"/>	<a href="#">SetDeviceHostnam</a>

[reboot](#)
[restore](#)

The health of an attached device is color-coded as follows:

Color	Description
Green	The device is communicating with the server.
Red	The device is not communicating with the server.
Yellow	The device is performing maintenance with the server and not fully operational.
Purple	The device is missing. This indicates that the device was once found, but it no longer is in the system. Missing devices may be deleted from this list by pressing <b>Delete</b> .



## Device Info Screen

The Device Info screen shows various types of information about the selected device. This information is defined as follows:

Device Information	Description
Class	The class of the device. For example, “switch” represents an ethernet switch and “NAS” represents a network attached storage device.
Serial Number	The serial number of the device.
Software Version	The software version of the software running on the device.
Management Version	The software version of the management system.
Mac Address	The Mac address of the device.
Model	The model of the device.
Hardware Version	The version of the hardware device.
IP Address	The IP address of the device.
Status	The status of the device. The status of the device is also reflected by the color of the device icon located on the left side.
Host Name	The host name of the device.
Show_Details button	This button toggles the Show/Hide Details tab. For more details, refer to “Showing Details” section on page 125.
Show_Syslogs button	This button toggles the Show/Hide Syslogs tab for this device. For more details, refer to “Showing Syslogs” section on page 126.
reboot button	Force the device to reboot
restore button	Force the device to default settings

**Device Info (NSS000000000002)**

Class	NAS	Model	NSS4000
Serial Number	NASP21SN	Hardware Version	V02
Software Version	micronas_rcB056	IP Address	192.168.140.201
Management Version	1.1	Status	ok
Mac Address	000000000002	Host Name	NSS000000000002

Show\_Details
Show\_Syslogs

**Device Commands**

password
changePassword

hostName
setDeviceHostnam

reboot
restore

## Device Commands

The Device Commands area allows you to change the password, change the hostname, reboot the device, or restore the device to its default values.

### To change a device password:

1. Click on the device to change.
2. Type a new password in the password area.
3. Click **changePassword**. The device password is changed to the new password.

### To change the hostname:

1. Click on the device to change.
2. Type a new hostname in the hostName area.
3. Click **setDeviceHostname**. The device password is changed to the new hostname.

### To reboot a device:

1. Click on the device to reboot.
2. Click **reboot**. The device will immediately reboot.

### To restore a device to its defaults:

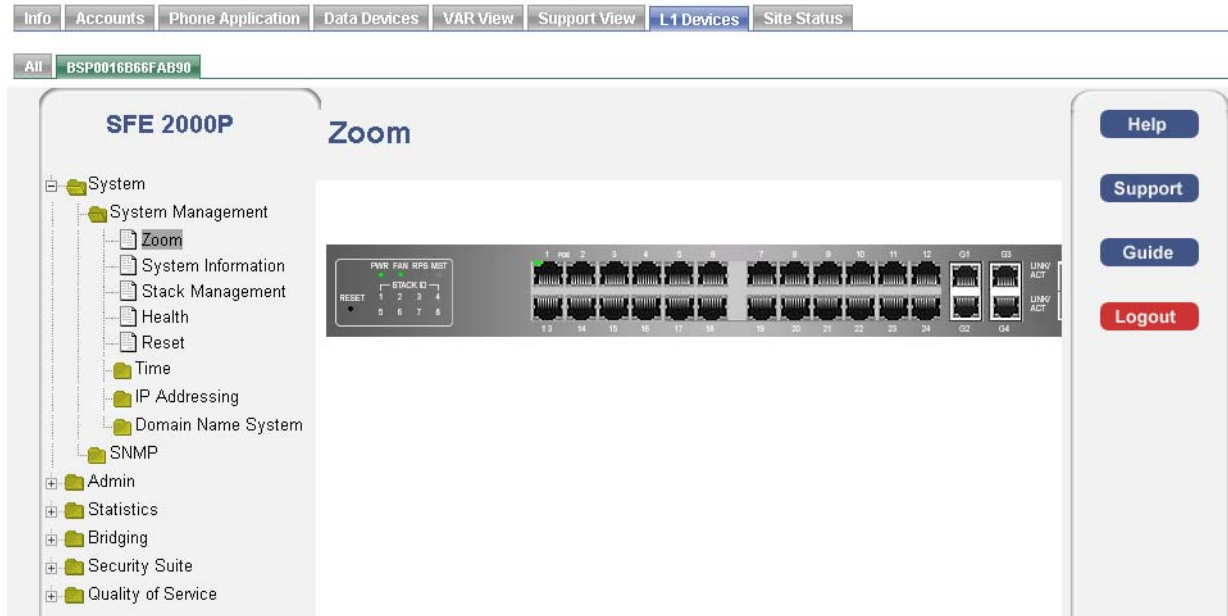


**CAUTION:** All user-defined settings will be lost when restoring a device to its default settings.

1. Click on a device to restore.
2. Click **restore**.
3. Click **reboot**. After rebooting, the device is restored to its default settings.

## Showing Details

The Show\_Details command allows you to view the web-based interface of a device.



**TIP:** To find out more information about a selected device, refer to the documentation provided with the device. Many devices provide on-line help in its interface.

**To view the web-based interface of a device:**

1. Click on a device.
2. Click **Show\_Details**. A new tab appears on the top of the window showing the name of the device.



**NOTE:** The device tab times out after 10 minutes of non-use. To view the device details again, click **Hide\_details**, and then click **Show\_Details**, or close your browser and re-connect.

3. Click on the tab to view the web-based interface.



**NOTE:** To remove the device tab, click the **Hide\_Details** button in Device Info window of the device.

## Showing Syslogs

The Show\_Syslogs command allows you to view the syslogs of a device.

The left column of the syslog window is filled with an asterisk (\*) for each new syslog message. To clear an asterisk from the column (indicating that you have acknowledged the message) click the **Acknowledge** button. If all syslog messages have been acknowledged, the **Acknowledge** button is not displayed.

The color of a syslog message is color-coded as follows:

Color	Description
Red	Priority level 0, emergency condition, the system is unusable
Yellow	Priority level 1, alert condition, action must be taken immediately
Grey	Priority level 2, critical condition

**To view the syslogs for a device:**

1. Click on a device.
2. Click **Show\_Syslogs**. A tab appears on the top of the window showing the syslogs of the device, if syslogs exist.
3. Click on the tab to view the syslogs for the device.



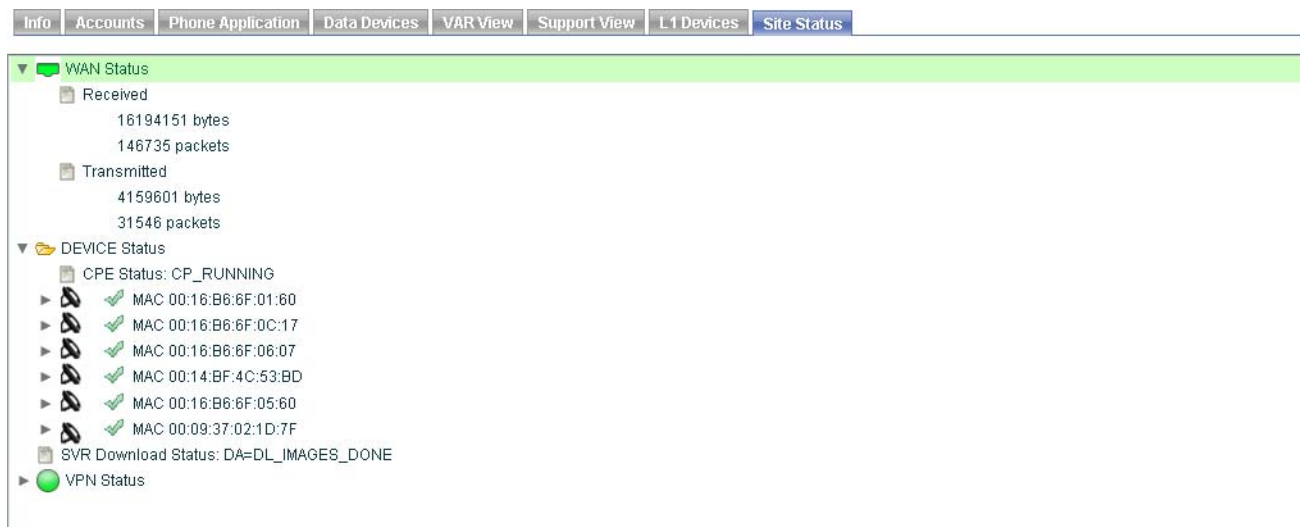
**NOTE:** To remove the syslog tab, click the **Hide\_Syslog** button in Device Info window of the device.

# Viewing Site Status

The Site Status screen allows you to quickly view the WAN, device, VPN, and SVR download status.

These sections help you to view the site status:

- “WAN Status” section on page 128
- “Device Status” section on page 129
- “VPN Status” section on page 131
- “SVR Download Status” section on page 131



## WAN Status

The WAN Status icon shows the status of the WAN and how much traffic has been transmitted and received.

The WAN status icon is color-coded as follows:



Color	Description
Green	WAN is working properly
Red	WAN is not working properly
Yellow	DNS failure or ping gateway failure

**To view received and transmitted data:**









- Click on the triangle next to the WAN Status icon. The WAN Status area expands showing received and transmitted data.

## Device Status

The Device Status area graphically shows the status of the devices in the Linksys One system. The device icons are defined as follows.

Device Icon	Description
	Linksys One phone device
	Linksys One gateway device

The status of the devices are shown graphically. The status icons are defined as follows:

Status Icon	Description
	The CPE is polling the Service Node to determine if it needs to download a new software image.
	A new software image is being downloaded from the Service Node.
	DHCP negotiations are taking place.
	Software is being transferred from the Services Router to a phone or other device.
	The phone or device is negotiating handshake information.
	The Services Router is sending configuration information.
	The phone or device is in the restart state.
	The boot process is complete.



## VPN Status

The VPN Status area shows the status of the VPN connection.

The VPN status icon is color-coded as follows:

Color	Description
Green	Fully connected
Grey	No members to query
Yellow	Cannot reach members

## SVR Download Status

The SVR Download Status area provides textual messages from the last time that a software image was downloaded to the Services Router.

# Where Can I Find More Information?

All Linksys One documentation is available to Linksys One Service Providers and VARs through the Linksys Partner Connection Program. See ["Linksys Partner Connection Portal," on page 137](#) for more information.

In Release 2.0, we introducing an auto-generated, customized phone Quick Reference Guide that users can display and print from their Linksys One Portal User Settings page. This guide includes the user's name, phone number, extension, and dialing plan, and lists only the features that are installed on the user's phone. We also introducing an Linksys One HSP Design Guide and Linksys One CPE Design Guide which include details on how to design and deploy the Service Node and CPE for the Linksys One communications solution.

## Linksys One Documents

The following table lists and describes currently available Linksys One documentation.

Document	Description	Audience and Availability
Linksys One Design Guides		
<i>Linksys One HSP Design Guide</i>	Covers Linksys One solution architecture and design considerations for the Hosted Solution Provider. Includes Service Node architecture, IP addressing requirements, telephony architecture and call routing capabilities, centralized hardware and software components and associated design considerations and caveats.	<b>Audience:</b> Linksys One Hosted Solution Providers. <b>Availability:</b> Available on the Linksys Partner Connection portal for Solution Providers (requires login).

Document	Description	Audience and Availability
<i>Linksys One CPE Design Guide</i>	Covers solution design guidelines for the Linksys One solution at the customer premises, including solution features, dial plan, broadband access requirements, network storage, telephony architecture, localization, LAN design, emergency services calling, supported CPE and other design considerations and caveats.	<b>Audience:</b> Linksys One Hosted Service Providers and Qualified Value-Added Resellers. <b>Availability:</b> Available on the Linksys Partner Connection portal for VARs (requires login).
Service Node Documentation		
<i>SN-XA Installation Guide</i>	Documents all aspects of planning, building, racking, cabling, installing and configuring a new Service Node SN-XA installation for all supported configurations. It also covers procedures for SN-XA expansion (for example, adding servers or optional VPN hardware or adding redundancy).	<b>Audience:</b> Linksys One Hosted Service Provider technical staff responsible for planning and performing the installation of a Cisco Service Node for Linksys One. <b>Availability:</b> Available on the Linksys Partner Connection portal for Service Providers (requires login).
<i>Service Node Administration Guide</i>	Documents node, brand and agent administration interfaces and procedures for administering and troubleshooting all models of the Cisco Service Node for Linksys One.	<b>Audience:</b> Service Provider technical staff responsible for administering a Cisco Service Node for Linksys One. <b>Availability:</b> Available on the Linksys Partner Connection portal for Service Providers (requires login).
<i>Service Node Software Upgrade Guide</i>	Documents procedures for upgrading node-level software on the Cisco Service Node for Linksys One.	<b>Audience:</b> Service Provider node operators responsible for maintaining and upgrading the Cisco Service Node for Linksys One. <b>Availability:</b> Available on the Linksys Partner Connection portal for Service Providers (requires login).

Document	Description	Audience and Availability
<i>Service Node Recover and Restore Guide</i>	Documents procedures for recovering and restoring hardware and software components for all models of the Cisco Service Node for Linksys One, including the Service Node database.	<b>Audience:</b> Service Provider technical staff responsible for maintaining the Cisco Service Node for Linksys One. <b>Availability:</b> Available on the Linksys Partner Connection portal for Service Providers (requires login).
<i>Service Node Security Guide</i>	Documents security architecture and policies implemented on the Cisco Service Node for Linksys One, including system access, accounts and passwords, level of access permitted for connectivity with other components in the Linksys One system and port and protocol usage.	<b>Audience:</b> Hosted Service Provider IT staff responsible for setting or enforcing security policy for their site. <b>Availability:</b> Available on the Linksys Partner Connection Portal for Service Providers (requires login).
<i>Service Node OSS/BSS Guide</i>	Documents the implementation strategy and application programming interface for integrating a Hosted Service Provider's operations and business support systems (OSS/BSS) with the Service Node. Provides detailed descriptions of all provisioning API functions and parameters, Call Detail Record (CDR) format and CDR retrieval.	<b>Audience:</b> Hosted Service Provider engineers responsible for integrating Service Node provisioning and CDR retrieval with operations and back-office support systems. <b>Availability:</b> Available on the Linksys Partner Connection portal for Service Providers (requires login).
<i>Service Node Release Notes</i>	Covers new and updated features on the Service Node for the current release, known issues, limitations, and CPE firmware version compatibility.	<b>Audience:</b> Hosted Service Provider IT staff. <b>Availability:</b> Available on the Linksys Partner Connection portal for Service Providers (requires login).

Document	Description	Audience and Availability
Linksys One CPE Installation and Administration		
Quick Installation Guides	Quick installation guides for each Linksys One and Linksys One-ready CPE component, including phones, voice gateways, Services Routers and switches.	<b>Audience:</b> Qualified Value Added Reseller (VAR) installers. <b>Availability:</b> Printed and shipped in the box with all Linksys One and Linksys One-ready components Also available on Linksys.com and the Linksys Partner Connection portal (requires login)
<i>Linksys One CPE Installation Guide</i>	Expanded installation guide that covers installation procedures, connectivity options and high-level troubleshooting for Linksys One Services Routers, voice gateways and IP phones (all models).	<b>Audience:</b> Qualified Value Added Reseller (VAR) installers. <b>Availability:</b> Available on Linksys.com and the Linksys Partner Connection portal for VARs (requires login).
<i>Linksys One Customer Premises (CPE) Administration Guide</i>	Covers installation, administration, and management of Linksys One customer premises equipment (CPE) through the Linksys One Portal.	<b>Audience:</b> Qualified Value Added Reseller (VAR) installers and administrators responsible for setting up and configuring the Linksys One solution at the customer premises. <b>Availability:</b> Available on Linksys.com
<i>Linksys One Advanced Administration Guide</i>	Covers the steps for setting up advanced network connections, security, quality of service, system monitoring, and other advanced topics for all Linksys One Services Router models (SVR200, SVR3000 and SVR3500).	<b>Audience:</b> Qualified Value-Added Resellers (VARs) performing advanced configuration under the guidance of Linksys One Customer Support. <b>Availability:</b> Available on the Linksys Partner Connection portal for VARs (requires login).
<i>CPE Release Notes</i>	Covers new and updated features for Linksys One CPE for the current release, known issues and limitations.	<b>Audience:</b> Qualified Value-Added Resellers (VARs). <b>Availability:</b> Available on the Linksys Partner Connection portal for VARs (requires login).

Document	Description	Audience and Availability
Linksys One IP Phone User Documentation		
<i>Quick Installation Guide for Linksys One Model PHM1200 IP Phones</i> <i>Quick Installation Guide for Linksys One Model PHB1100 IP Phones</i>	Quick installation guides for Linksys One IP phones.	<b>Audience:</b> All Linksys One IP phone users and Qualified Linksys One VAR installers. <b>Availability:</b> Printed and shipped in the box with all Linksys One IP phones. Also available on Linksys.com and the Linksys Partner Connection portal (requires login).
<i>Linksys One IP Phone User Guide</i>	In-depth documentation of all phone features and applications for Linksys One Model PHM1200 and Model PHB100 IP Phones.	<b>Audience:</b> All Linksys One IP Phone users <b>Availability:</b> Available on Linksys.com and the Linksys Partner Connection portal.
<i>Linksys One IP Phone HTML Quick Reference</i>	Printable HTML phone quick reference for Linksys One Model PHM1200 and Model PHB100 IP Phones.	<b>Audience:</b> All Linksys One IP Phone users <b>Availability:</b> Available online on the User Settings page of the Linksys One Portal (individual users can log in to their User Settings page and select Print Quick Reference).

## Linksys One Ready Documents

To find documents for Linksys One Ready products, go [www.linksys.com](http://www.linksys.com) and search on the product name.

## Linksys Partner Connection Portal

Linksys One Service Providers and VARs have access to documentation, technical support, marketing and sales information through the Linksys Partner Connection Program.

### How to Become a Linksys Connected Partner

To apply for membership in the Linksys Partner Connection Program:

1. Direct your Web browser to [www.linksys.com](http://www.linksys.com).
2. From the navigation menu at the top of the Linksys Home page, select **Partners > Apply for Partnership**.
3. Select either VAR or Service Provider as the Partner Type.
4. Click Become a Linksys Connected Partner.
5. Follow the on-screen instructions.

### How to Access the Linksys Partner Connection Portal

To log in to the Linksys Partner Connection portal:

1. Direct your Web browser to [www.linksys.com](http://www.linksys.com).
2. From navigation menu at the top of the Linksys Home page, select Partners > Partner Login.
3. Enter your login information and select either Service Provider or VAR (Value-Added Reseller).
4. To access Linksys One content:
  - If you are logged in as a VAR, select **Networking Solutions > Linksys One**.
  - If you are logged in as a Service Provider, select **Products and Solutions > Linksys One**.

# Linksys One Contact Information

Visit Linksys One online for information on the latest products and product updates at:

<http://www.linksysone.com>

Can't find information about a product you want to buy on the web? Do you want to know more about networking with Linksys One products? For pre-sales product questions call:

800-487-2409

If you experience problems with any Linksys One product at any time, contact your Value Added Reseller (VAR). If you are a VAR, contact Linksys One Technical Support at:

866-870-5826.



# Troubleshooting

The Linksys One Communications Solution is designed to eliminate the installation and maintenance complexities usually associated with the Internet and voice over the Internet Protocol (VoIP) equipment. However, should you experience problems with the Linksys One CPE, refer to the procedures in this section:

- "Troubleshooting Installation" section on page 139
- "Troubleshooting the Services Router" section on page 140
- "Troubleshooting the Voice Gateway" section on page 143
- "Troubleshooting Connected Devices" section on page 145

For more detailed troubleshooting information about Linksys One products, go to <http://kb.linksys.com> and select Linksys One Products in the Product area.

## Troubleshooting Installation

The most likely cause of Linksys One CPE installation problems are:

- Firewall blocking required ports between the Services Router and the Internet.
- No Dynamic Host Configuration Protocol (DHCP) server is available to assign the Services Router an IP address. The Services Router is by default, a DHCP client.
- If the USB key is missing, the Services Router and devices attached to it will not boot (SVR3000 only).
- If Point to Point Protocol over Ethernet (PPPoE) is being used, incorrect account information is entered.

***My Services Router is configured to use DHCP by default, but it is not showing me the initial handshake screen?***

Your ISP's DHCP server (cable modem/DSL modem) may only serve one IP address and that IP address may already be leased to a different device with an expiry date in the future. You can usually resolve this situation by doing the following:

1. Power-cycle your cable modem/DSL modem to restart its DHCP server.
2. Connect a Cat5 cable from the cable modem to the WAN W1 port of the Services Router.
3. Power-cycle the Services Router to perform a new DHCP request and initiate the initial handshake with the upstream Service Node.

***My ISP's Internet device does not act as a DHCP server so how do I configure a static IP address on the Services Router?***

See "Administering the Service Router" section in the *CPE Administration Guide*.

## Troubleshooting the Services Router

The Services Router is the heart of your Linksys One voice and data solution. Your network and phones will not function until the Services Router is fully operational.

***The Services Router will not power up.***

- Verify that the power cord is plugged in to the Services Router.
- Verify that there is power to the outlet.
- Verify that the USB key is plugged in to the Services Router (SVR3000 only).
- Replace (RMA) the Services Router.

***How do I determine the software status and software version running on the Services Router?***

To find out the status and version of software running on the Services Router, open the Support page on your Linksys One web portal and click the **Info** tab. You can also find out the software version by pressing the **Tasks > Support** menu on any phone on the Linksys One network.

***How do I determine the IP address for the WAN port?***

To find out the IP address for the WAN port on the Services Router, open the Support page on your Linksys One web portal and click the **Info** tab. You can also find out the IP address by pressing the **Tasks > Support > Next** menu on any phone on the Linksys One network.

**How do I verify if the WAN is running?**

Press the **Tasks > Support > Next** menu on any phone on the Linksys One network and observe the WAN status.

**When does data start flowing to devices through the Services Router after a reboot? How long will it take before computers attached behind phones can use the Internet again?**

The Services Router is ready for data traffic when the **SYSTEM** LED is solid green. Although the Services Router supports data traffic while downloading a new image; however, the data traffic is briefly interrupted once the image download is complete and the Services Router reboots to load a new image.

**Devices connected to my Services Router cannot access the Internet, should I reset it?**

No, don't reset your Services Router yet. First verify that the Internet connection to the W1 WAN is up and running.

**The Services Router appears normal, the computer was accessing the Internet, now it's not. I've used Windows to repair the interface and it succeeded.**

Assuming that your Internet connection tests okay, verify that:

- Your ISP's DNS is functioning as expected.
  - Connect a computer directly to the Ethernet port on the broadband access device where the W1 port of the Services Router is normally connected.
  - Acquire a new IP address using either DHCP or configure manually.
  - Verify that you can ping a known server such as the **www.linksys.com** site. Failure at this point could allow you to rule out the Services Router as a cause.
- Your ISP's gateway is functioning as expected.
  - Connect a computer directly to the Ethernet port on the broadband access device where the W1 port of the Services Router is normally connected.
  - Acquire a new IP address using either DHCP or configure manually.
  - Verify that you can ping a known IP address. Failure at this point could allow you to rule out the Services Router as a cause.

***The SVR3000 or SVR3500 Services Router is hot to the touch***

The Services Router is cooled by forced air from cooling fans. The fans draw cooler air in from one side and expel heated air out the other side.

- Verify that the sides of the Services Router have at least two inches of clearance in order to promote air circulation and cooling.
- Verify that you can hear the Services Router's cooling fans running. The fans are clearly audible when running at full speed.



**NOTE:** The cooling fans on the Services Router run at different speeds depending on the internal cooling requirements of the router.

- If the Services Router is hot and the cooling fans are not running, replace (RMA) the Services Router.

***The SVR3000 or SVR3500 Services Router's cooling fans are noisy***

The Services Router requires a lot of cooling due to the fact it powers all the phones and Voice Gateways with power over Ethernet (PoE). The cooling fans on the Services Router make some noise when they are running, and they do vary in speed as part of normal operation. It is normal for the fans to stop running if the temperature of the Service Router becomes cool enough.

***CPE alarms, but no alarm e-mails are received.***

In order for CPE alarm e-mails and attachments to be received, the customer's ISP must allow SMTP traffic on port 25 and the destination domain for the e-mail address must be able to accept the e-mail (for example, restrictive spam filtering may cause these emails to be rejected).

***Voicemail-to-Email is configured, but e-mails and attachments are not received at the target destination.***

In order for CPE e-mails and attachments to be received, the customer's ISP must allow SMTP traffic on port 25 and the destination domain for the e-mail address must be able to accept the e-mail (for example, restrictive spam filtering may cause these emails to be rejected).

## Troubleshooting the Voice Gateway

### *How do I determine what the Voice Gateway is doing?*

View the Voice Gateway's LEDs in order to determine its status:

SYSTEM LED	Green when operational; red when booting or faulty.
LINE LED	Green when the VGA2000 is connected to the public telephone network and the line is available. Flashing green when the line is in use. Red when the line is not registered with the Services Router.
PHONE LED	Green when the port is available; flashing green when the port is in use. Red when an intercom or phone line is not registered with the Services Router.
LAN LED	Green/green flash when the VGA2000 is connected to the Services Router. RED when there is no LAN connection available.

### *My Voice Gateway doesn't detect a dial tone. What can I do?*

To check the dial tone, you can connect an analog phone directly to the line and go off-hook. If the VGA still does not detect a dial tone, verify the following:

- The phone line may have been disconnected from the Voice Gateway. Reconnect the phone line.
- The phone line may be out-of-service or there may be a problem with the PSTN network. Try calling the number from another phone to verify that it is in service.

### *How can I test the Voice Gateway to verify that it's properly routing emergency services calls?*

Use an FXO line emulator to emulate the Central Office's functionality in order to verify that emergency services calls are properly routed. If emergency services calls are not routed over the FXO line, contact your Service Node provider to gather logs and then contact your local PSTN to ensure service is available.

If you do not have an FXO emulator, do the following:

1. Contact your local emergency services agency and tell them that you want to test a emergency call.



**IMPORTANT:** Do not call an emergency number without the approval of your local emergency services calls agency. They may be experiencing a high volume of emergency traffic and not able to receive a test call.

2. When allowed by your local emergency services calls agency, dial the emergency number, **remain on the line** and speak to the operator.
3. Say the following to the operator; **“This is a test call only, there is no emergency.”**
4. Verify with the operator that the correct physical address is reported by the system.

#### ***How can I restart the Voice Gateway?***

You can reboot it or power-cycle it. To reboot, do the following:

1. Open the Support page on your Linksys One web portal.
2. Click **Devices**.
3. In the list of devices, find the voice gateway that you want to restart.
4. Click **Reboot**. The voice gateway will immediately restart.

#### ***How do I determine the status/version of software running on the Voice Gateway?***

To find out the version of software running on the Voice Gateway, open the Support page on your Linksys One web Portal and click the **Devices** tab. The software version number is displayed in the version column.

## Troubleshooting Connected Devices

*During a long power failure, the Services Router lost power because the UPS ran out of capacity. The power failure is now over but the computer is not able to access the Internet. When will the Internet access be restored?*

Your computer will be able to access the Internet as soon as the DHCP server on the Services Router makes an IP address available to your computer and provides a route to the Internet.

*Some devices connected either directly to a port on the Services Router or to the phone's switch port do not appear in the Services Router's Data Devices screen. The devices are fully functional, so why aren't they found?*

The Services Router only reports its DHCP clients in the Data Devices screen. Thus, if you've manually configured a static address on a device, it will not be reported by the Services Router.

*Why is the reset button on my switch not working?*

The reset button has two functions, reboot and restore defaults. To reboot the switch you can hold the reset button for 5 seconds. To restore defaults hold the reset button for 15 seconds.

*How do I restore defaults?*

You can reset the switch via the Linksys One Portal screens. Open up the Linksys One Portal screen and click on the **L1 Devices** Tab. Locate the switch you want to restore defaults on and select it. Now you can click **Restore**, and then click **reboot**. If you can't get to the Linksys One Portal screen, you can also hold in the Reset button for 15 seconds.

*How do I configure the Linksys One Ready device?*

Open up the Linksys One Portal screen. Then click the **L1 Devices** tab. Locate your device and select it. Click **Show Details**. A new Tab will appear with your device name. Click on that Tab and you can configure the device on that screen. You can also go directly to the device via the IP address in a Web Browser. Refer to the documentation supplied with the Linksys One Ready device for more details.





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